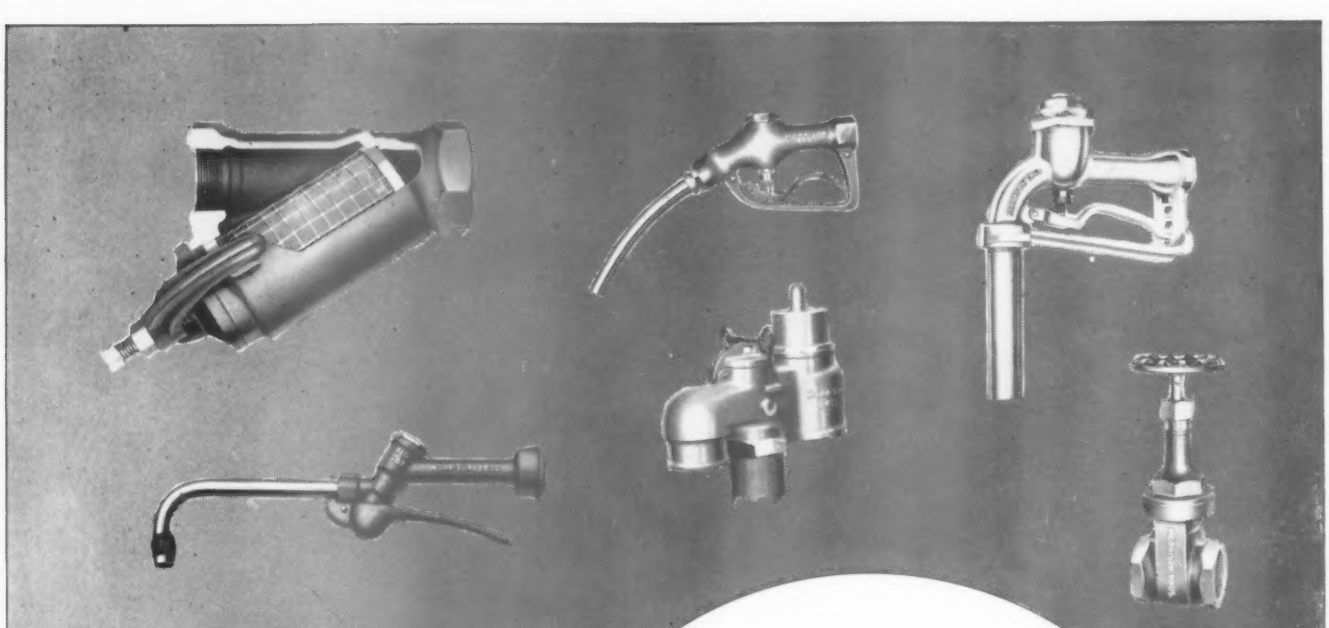
March 8, 1944

NATIONAL PETROLEUM NEWS

TECHNOLOGY DEPT.

Camel Train Carries Oil To Yanks in Burma

By tanker, truck, airplane and tank car, America's fighting oil is carried to our fighting forces and allies all over the world but in India the U. S. Army resorts to a mode of conveyance commonplace in that country but strange to the eyes of Americans. Here a camel hitch carries, among other war essentials, a supply of fuel to help our forces in the battle against the Japs.



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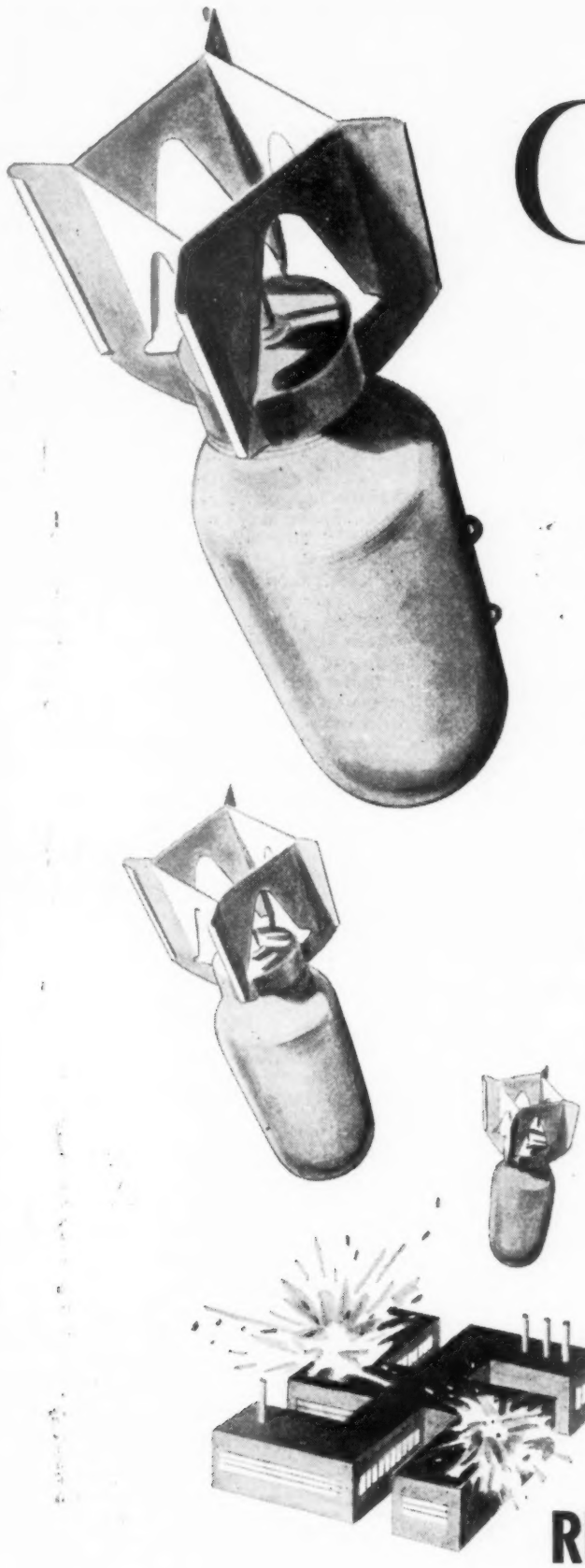


Going Places...

. . . right into the belly of a Nazi factory . . . helping to cut the heart out of a German city.

Superior air power didn't just happen. Well laid plans, mass production, and American industry made it possible. Powerful fuels and high octane gasoline give our air armada a point of advantage over the enemy.

Republic will soon be a major producer of 100 octane gasoline. Our new mammoth facilities will be in full operation shortly.

After the war, these facilities will be turned over to peace time production. Our dealers will benefit . . . for Republic is now laying sound marketing plans for the future.

These plans will result in complete product acceptance, more business, and higher profits for Republic distributors. Make no little plans if you market our products, because . . .

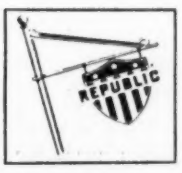
REPUBLIC'S GOING PLACES

Just Issued

A new booklet explaining aviation gasoline in non-technical terms. Write for a Copy Today!

REPUBLIC OIL COMPANY

Benedum Trees Building



Pittsburgh, Pennsylvania

George N. Olson, president

George B. Davies, vice-president

Merle S. Becker, secretary

Henry G. Plane, treasurer

Head Chicago Oil Men's Club

CHICAGO Oil Men's Club members are looking forward to an active year under the energetic leadership of their newly elected president, George N. Olson of the George N. Olson Co. Mr. Olson broke into the oil business as a door-to-door salesman of lube oils for The Texas Co. in 1916. Later he organized his own company and today is one of the best known wholesale marketers in the Middle West. He says his company's slogan, "Let George do it!" does not apply to club activities. He previously served two years as club treasurer and one year as vice-president. He joined the club seven years ago.

Anyway, Mr. Olson will not be required to do it all, as George B. Davies and Merle S. Becker were re-elected club officers this year and Henry G. Plane was added.

Mr. Davies moved up from the post of secretary to vice president and Mr. Becker, former treasurer, was named secretary with Mr. Plane being named treasurer. Mr. Davies is sales manager for Jensen Petroleum Co. He spent most of his first 10 years in the oil business in the South and Mid-Continent.

Mr. Becker manages Chicago office of Sun Oil Co., with 23 years in the oil business behind him. He started with Standard of Indiana in North Dakota as chief clerk, and five years later moved to Chicago with Sun.

Mr. Plane is a native of DuBois, Pa., where he practically grew up among the oil derricks, but had no actual connection with the industry until he came to Chicago and joined Johnson Oil Refining Co. in 1917. He's been with them ever since except for a year and a half spent in the Army during World War I. He is now manager of refinery sales for the company.

NEW WARTIME EDITION

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BULLETINS

MAY EXPAND "R" COUPON BAN

WASHINGTON—OPA is expected to amend its gasoline regulations within the next few days to prohibit the handling of "R" coupons by filling stations after April 1. Decision to impose the ban on a country-wide basis is a result of success with the laboratory experiment conducted in Georgia and Florida where since Feb. 1 these 5-gal. off-the-highway coupons have been usable only for purchases delivered to farmer's own tank or made at bulk plants. It is expected that "E" coupons, good for only one gal., will continue to be accepted at filling stations.

TANK TRUCK CHIEFS NAMED

WASHINGTON—W. A. Cheshire, connected with tank truck operations of California Standard and recently with ODT's motor transport division on the West Coast, has been appointed regional chief of the tank truck section of ODT's division of petroleum and other liquid transport, with headquarters in San Francisco. A like appointment, as regional tank truck chief with headquarters in New York City, is that of J. Stanley Bird, formerly operations manager in the New York territory for Kesbec, Inc., Jersey Standard subsidiary.

ORDER TEST TO CUT FARM "GAS"

WASHINGTON—In an effort to provide a closer check on gasoline issued to non-highway applicants, OPA March 7 ordered, for experimental purposes, that the Lancaster, Pa., local ration board begin keeping records of gasoline issued to such consumers when they do not have a ration bank account.

DELAYS O. K. ON "SCREENING"

INDIANAPOLIS — Plan for industry committee to screen complaints in closer OPA-Industry joint enforcement program was explained to Charles F. Phillips, director, OPA automotive supply rationing division, at meeting of National Council of Independent Petroleum Assns. in annual session here March 7. Mr. Phillips said plan "sounded good" but he had no authority to grant outright approval. He said he would take up proposal with OPA Administrator Bowles and Deputy Houston on return to Washington.

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NATIONAL PETROLEUM NEWS

March 8, 1944
Volume 36, Number 10

Congress Last Hurdle for Arab Oil Deal

Ickes Stands Pat, Saying He Will 'Go Ahead Until Stopped'; PIWC Policy Makers Angry, Call Near East Nest of Wars

By Herbert Yocom, Chief, NPN Washington Bureau

WASHINGTON—Only the Congress now stands between the Administration and final consummation of its trans-Arabian pipeline deal.

Secretary Ickes personally served notice to that effect this week when, with a figurative wave of the hand, he brushed aside the weighted objections of the American petroleum industry and let it be known in unmistakable language that the Administration intends to drive ahead, regardless of what anyone might say or think.

"I'm going ahead until I'm stopped," was the way Mr. Ickes put it—and he left no doubt in the minds of newsmen that it would take nothing less than an act of Congress to do that.

As to the opposition of industry to this foreign oil venture of the U. S. government—outlined to him orally, at an hour-and-a-half session with P.I.W.C., and by written report and resolution (*see p. 4*)—the secretary said the only trouble was that he didn't agree with the industry. He characterized his and the industry's divergent views as just "an honest difference of opinion," but made plain whose position he thought to be the correct one by adding the following:

"I take issue that this is getting the government into the oil business. It (government) is merely providing a facility. No one said that we were getting into the oil business when we built either the 24 or the 20-inch pipelines.

"As a facility, I compare it (the trans-Arabian pipeline) to the Panama Canal. That didn't put the government into the transportation business and the railroads that carry oil in tank cars aren't in the oil business. The highways that the government builds over which oil is hauled in tank trucks haven't put the government, either federal, state, or local, into the oil business.

"There is no intent on the part of anyone in the government so far as I am aware to go into the oil business. We don't want to go into the oil business."

Mr. Ickes had a lot of other things to say, as well.

One was that the P.I.W.C., meaning industry, already knows all there is to

(*Continued on p. 11*)

In This Issue

Foreign Oil—In addition to the stories on this page there were these other developments this week in the hotly disputed subject of foreign oil:

Texas Railroad Commissioner Thompson fears flood of imported petroleum will ruin small independents, p. 30.

Industry leaders ask why search for extra crude is not pushed closer to U. S., citing favorable possibilities in Navy's reserve at Point Barrow. See Ozanne's column, p. 12. Issue closed is Ickes' attitude, says Herbert Yocom, p. 12.

Postwar Prospects—New peacetime highs in fuel consumption and automobile production by 1950 sighted in industry surveys, p. 32.

Optimistic outlook for synthetic rubber given at symposium of American Society for Testing Materials in Cincinnati, p. 24.

★ ★ ★

Moffett Slams Ickes, Demands His Impeachment

NPN News Bureau

NEW YORK — James A. Moffett, veteran oil man and former housing administrator in the Roosevelt Administration on March 2 denounced the Arabian pipeline project as "an unjustified venture by bureaucracy", and called for the resignation or impeachment of PAW Ickes.

Mr. Moffett announced that he had resigned last Oct. 25 as chairman of the California Texas Oil Co. and the Bahrein Petroleum Co., Ltd., subsidiaries of The Texas Co. and the Standard Oil Co. of California, to "fight the methods of Secretary Ickes in dealing with the oil situation."

Mr. Ickes retorted that Mr. Moffett was "not true with the facts and way off base" and concluded: "He has never been very happy since I refused to put him on my oil staff in NRA days."

In his signed statement, which was released simultaneously in New York and Washington, Mr. Moffett denied that an oil shortage existed and assailed the entire handling of the petroleum problem by PAW Ickes. Mr. Moffett said:

"It is hard to understand, as an American citizen, why the Standard Oil Co. of California and The Texas Co. should be permitted by Secretary Ickes, as Petroleum coordinator for war and president of the Petroleum Reserves Corp., to have priorities to construct a commercial refinery and pipeline, which do not aid our war effort, and which require: First, materials and steel; second, shipping space, when we are supposed to be short of ships; third, manpower; and when it will take a year and a half to two years to complete this construction.

"Exclusive of transporting materials

(*Continued on p. 11*)

State Dept. and British Arrange Talks on Oil

WASHINGTON—In an announcement issued simultaneously in London and Washington March 7, the State Department said the U. S. and British governments would undertake preliminary and exploratory discussions on petroleum questions. These discussions, the announcement added, will be, in the first instance, on an "expert technical level and will take place in Washington."

The statement added that:

Informal conversations with the British government on problems of mutual interest relating to oil would "lead at an early date to further conversations between the two governments at a higher level."

For this purpose, President Roosevelt has appointed a group under the chairmanship of the Secretary of State, consisting of Secretary Ickes as vice-chairman, Undersecretary of War Patterson, Undersecretary of the Navy Forrestal, Charles Rayner, State Department petroleum adviser, and Charles E. Wilson, vice-chairman of WPB.

In making the announcement, Acting Secretary Stettinius stated that should these conversations lead to conclusions, no decision affecting producing areas would be taken "without consultation with the governments of the countries concerned."

Pa. Crude Assn. Hits PRC

OIL CITY, Pa.—At its regular meeting here Feb. 16, the board of directors of the Pennsylvania Grade Crude Oil Assn. unanimously adopted the following resolution in support of S. J. Res. 110, introduced in the Senate Jan. 21 by Sens. E. H. Moore and R. O. Brewster:

WHEREAS, the directors of the Pennsylvania Grade Crude Oil Assn. believe:

(1) That the government should not engage directly or indirectly in the production, transportation, refining or marketing of oil, either in domestic or foreign fields, and that this is the considered judgment of the American oil industry as a whole; and

(2) That experience has shown that reserves of crude oil in foreign countries can and will be provided by American nationals on their own initiative if given proper encouragement and support by the government.

Now, Therefore be it resolved:

That the Petroleum Reserves Corp., a corporation organized and controlled by the government, should be dissolved.

A National Oil Policy for the United States

(A Preliminary Report of the National Oil Policy Committee of the Petroleum Industry War Council)

February 28, 1944

Foreword

THE National Oil Policy Committee submits herewith a brief preliminary report outlining those principles believed essential to the determination of a national oil policy. Because of the importance of oil to both the security and welfare of this country, the Committee is well aware of the responsibility imposed upon it. It has not completed the detailed studies which such a task requires, but has prepared this preliminary statement of principles at the special request of the Petroleum Administrator for War.

In its studies to date, the Committee has been deeply impressed by the tremendous strides made by the petroleum industry in the production and manufacture of petroleum and its products. Probably no product illustrates more dramatically the increase in materiel requirements of World War II over World War I. After successively meeting the demands of the first World War, the petroleum industry continued to improve the techniques and methods in every department of the business, based upon the enterprise and resourcefulness characteristic of America and stimulated by the greatest petroleum market in the world.

In 1918—the last year of World War I—the annual production of crude oil in the United States was 355,928,000 barrels compared with a present annual production of 1,503,427,000 barrels; there were 203,000 producing oil wells, against 405,000 wells today; an underground proven oil reserve estimated at 6,200,000,000 barrels, compared with 20,064,152,000 barrels now; a refining capacity of 1,186,000 barrels daily of crude oil against about 5,000,000 barrels daily at present, and a mere 50,000 miles of main oil pipe lines as against the present network of 140,000 miles. Gasoline yield per barrel of crude oil processed was 25 percent and today is estimated at 44 percent. The quality of gasoline has been immeasurably improved and 100-octane gasoline for war has come into being in huge quantity. In 1918 and for several succeeding years after the first World War, talk of an oil shortage was rampant and all sorts of artificial schemes were advanced to substitute for the dynamic force of private initiative. The contrasting figures above are sufficient to show what a mistake it would have been after World War I to have adopted static, planned operations proposed at that time through fear of shortage and not to have trusted the dynamic, vigorous activities of the petroleum industry.

It was only as a result of the progress attained in those intermediate years that the industry was able to meet the many times multiplied demands presented by World War II.

Although the present report is subject to change when the Committee's studies are completed, we believe that the changes, if any, will be largely those of expression and elaboration rather than of principles here advanced.

I. Basic Principles

Three basic principles must guide the building of a national oil policy if the public interest is to be adequately served. These principles, which also are useful to screen out impractical or harmful proposals, follow:

1. *Oil Finding*:

Continued vigorous, intensive venturing of capital to keep up the search and to find oil is the most important basic necessity for the future oil production in the United States. Such effort can be carried on effectively only by private venture capital based upon a sound and profitable large-scale domestic oil industry.

Without such continuous oil finding effort on a large scale, all other possible policies are without serious significance in promoting our future progress in oil. Every proposed policy which may weaken this effort should be rejected. Our preliminary views of a national policy have kept this basic principle to the fore as the most important one by which policies should be judged.

2. *Oil Production*:

The oil producing states of this country have during the past 15 years gradually developed the practice of producing oil in accordance with sound engineering principles intended to avoid waste in recovery and, by laws of the various states, this principle has been extended to avoid waste in storage above ground by limiting production within sound engineering practice and within available market demand. These principles of production are referred to as produc-

Text of P.I.W.C. Resolution Condemning Arabian Pipeli

Following is the text of the resolution adopted by the Petroleum Industry War Council March 1 opposing the construction of a pipeline in Arabia and calling for the dissolution of PRC:

At the February, 1944 meeting of the Petroleum Industry War Council, a resolution was adopted advising against our Government entering the oil business and recommending that the Petroleum Reserves Corporation be dissolved as unnecessary for the war effort. Within two days after that meeting, announcement was officially made that the Petroleum Reserves Corporation had signed, with certain oil companies, a document called "Principles of Agreement", providing for the United States Government to construct, own and maintain a pipeline system about 1000 miles long between the Persian Gulf and the eastern end of the Mediterranean Sea. A letter by the Secretary of the Navy, addressed to the Senate Committee, within the past few days, indicates an intention to find additional projects for commitments by our Government not connected with this war, commitments and involvements of this nation in foreign countries, through the medium of the Petroleum Reserve Corporation, without any relation between such projects and the carrying on of this war.

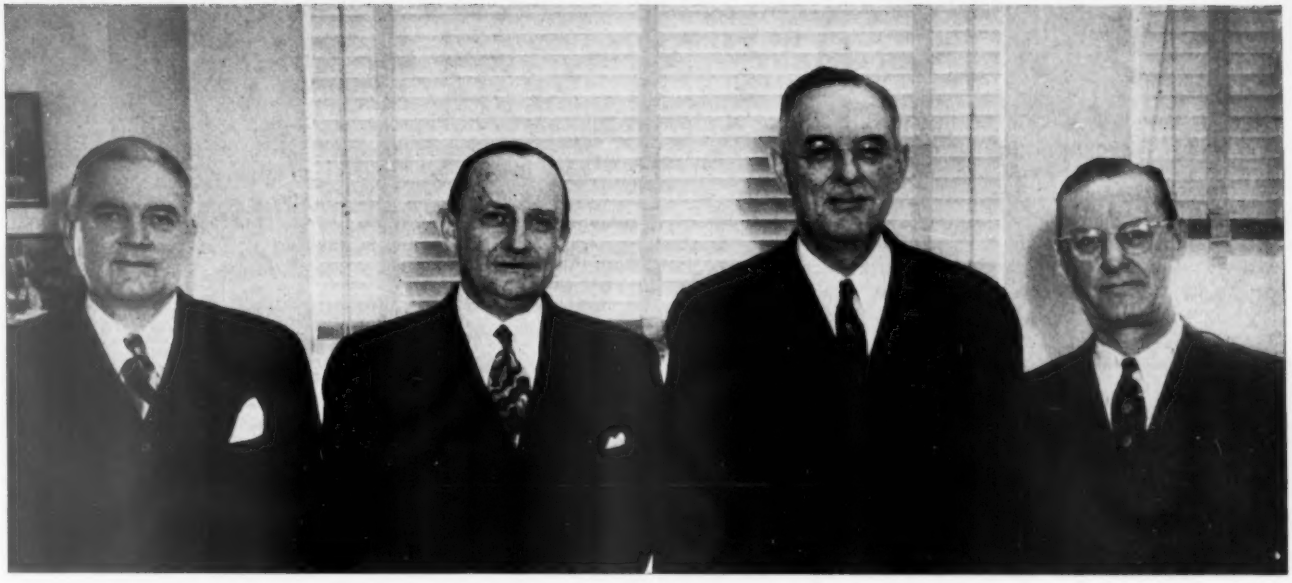
Contrary to some publicity, the pipeline project will not result in the acquisition of any new oil reserves for the United States or its citizens, nor does it make accessible any oil not already accessible. It is not a project related to winning this war. The oil in the Persian Gulf is already on the seacoast and can be shipped by tank steamer anywhere in the world. All that the pipeline does is to reduce the cost of transportation of the oil to the Eastern Mediterranean by an amount estimated at fifteen cents (15c) or perhaps twenty cents (20c) a barrel, equal to less than one-half cent (½c) per gallon. It is estimated the cost of the project will approximate $150,000,000.00.

Among the objections to the project, are:

(1) Although the Petroleum Reserves Corporation, which will construct and maintain the pipeline, was created under the war powers of the Reconstruction Finance Corporation, the project cannot be considered a war measure because it is unlikely that the pipeline can be completed and in operation before the termination of the present European war.

(2) The agreement will put the United States government directly into an international transportation business in the Middle East, as owner and maintainer of the pipeline, and the United States government will declare in the contract that it will promote and protect the interests of the governments of the territory traversed, entirely without reference to the future nature of jurisdiction or policies of such governments and without reference to existing spheres of influence which may be claimed by other countries.

(3) The optioned reserve of one billion barrels of oil in the Persian Gulf Fields



Snapped during a lull in proceedings of P.I.W.C. last week were these prominent oil leaders, left to right: George A. Hill, Houston Oil Co.; William R. Boyd, Jr., P.I.W.C. chairman; John A. Brown, oil policy committee chairman and Ralph T. Zook, president Independent Petroleum Assn. of America

ing in accordance with the optimum-rate and, we believe that optimum-rate production is the key to sound conservation practices and efficient oilfield operations.

3. *Government Attitude*:

(a) Government should encourage the petroleum industry to assume risks inherent in oil finding and production by minimizing such risks so far as possible.

(b) Government should not invade the province of industry either by participating with industry in operations or by itself entering into any phase of the business.

(c) As the public interest is protected by law from monopolistic practices and anti-social activities on the part of business, so the public interest should be safeguarded from the disruptive effects of improvised policies on the part of government that may have narrow or short-sighted objectives. Some of these safeguards can be provided by the principle of government and industry consulting on all actions having to do with policy.

(d) A dynamic factor that has made it possible for the industry to grow so consistently in the face of repeated predictions that we were running out of oil, is the development of technological methods in every branch of the industry. This technical progress is the result of competitive research within the industry and constitutes one of the great American achievements during the past quarter-century. Instrumental in promoting this invaluable asset has been the general policy of making new developments available for license on reasonable terms. It is vital to our future growth and development that such processes be encouraged rather than discouraged as they would be by proposals for governmental domination of research, emasculation of our patent system, or entry by the government into competitive research in fields where private research is adequately covering the ground.

II. Suggested Elements of Policy

1. *The search for oil is best promoted in an atmosphere of competition and confidence*:

(a) Any threat of governmental interference is harmful to this most individualistic of all economic activities, the oil industry.

(b) Conditions of frozen prices and limited materials and manpower, however, unavoidable in war, are harmful to oil search and should be reversed as soon as consistent with the general interest. Locked up productive capacity in the possession of the government, which can be turned loose on the domestic economy at any time without notice, would be one of the most crippling influences and of a character discouraging to oil finding efforts.

(c) National security and economic welfare can be served by encouraging

(*Continued on p.* 45)

ipeline Deal and Asking Dissolution of PRC

controlled by American nationals is meaningless, because in times of war or other emergencies all the oil produced by American companies or citizens anywhere in the world is available to the American government if it can control the necessary transportation routes to the desired destinations.

(4) Adjoining nations may well consider that the United States government has taken direct action to increase the Arabian output as against their output of petroleum and will demand, and probably obtain, increased transportation facilities for their production. It must be remembered that the national revenues of these nearby countries are largely dependent upon the amount of their crude oil which can be currently exported.

(5) The contract assumes, if it does not commit the United States and its Nationals to, marketing a large additional amount of oil to be produced from the Persian Gulf Fields in competition with other world sources of supply. It will have a serious effect on exports from South America, and United States, and may create ill-feeling with our South American neighbors. If such a result arose from private company action, these countries could not feel aggrieved but when their economics are adversely affected by direct and unnecessary action on the part of the United States government itself, they will undoubtedly feel that they have a real grievance.

(6) It is not necessary for the United States government to build this pipeline. If it is justifiable from a commercial standpoint the companies should, and are able to, build it—if not commercial, it should not be built.

(7) The direct participation by the governmant of the United States in a pipeline system traversing the territory of three foreign nations can easily lead to international misunderstanding and pave the way to a future war through the involvement of our national honor. Certainly such a project with all of its implications should be submitted for the approval of Congress with ample time for thoughtful consideration.

(8) Any advantages which might accrue to the United States and its people from the construction of such a pipeline by the United States government could all be obtained through the vigorous and sympathetic diplomatic support on the part of our State Department, under established principles of international law of the rights of our Nationals operating in foreign fields.

NOW, THEREFORE, it is the sense of the Petroleum Industry War Council that the proposed contract, providing for the United States Government undertaking to own and maintain an international pipeline system in the Middle East, is against the interest of the people of the United States and all the American oil industry; that the final definitive contract should not be consummated and that the Petroleum Reserves Corporation should be dissolved.

Adopted:

Petroleum Industry War Council
March 1, 1944.

Station Dealer's Plea Makes Stirring Story for Columnist

Here is the best picture of the predicament of the oil marketer and his employes, struggling under the double burden of gas rationing and customer pressure, we have yet seen. This was written by a follower of Cedric Adams and published in Mr. Adams' column "In This Corner" in the *Minneapolis Tribune*, Feb. 27. It is so good that a copy of it got down to Indianapolis where Sam Hurd, secretary of the Individually Branded Petroleum Assn. saw it and sent a copy to the NATIONAL PETROLEUM NEWS.

Passing this picture around to the general public not only will help the service station men explain their position, but it will back up the advertising and publicity campaigns now underway by OPA and P.I.W.C. to teach the public that gasoline rationing can only succeed if and when the public, every motorist, truck owner and farmer, make it succeed. —WCP.

IN THIS CORNER with Cedric Adams

ARE YOU GUILTY? Read this plea and see how the shoe fits. "You've got a big shoulder and I feel like I'm going to cry," writes the correspondent. "I'm a little man who stayed home to become a crook. I didn't want to become a crook, but my good, honest customers have made a crook out of me. My name is OILY. It all started back in December of 1941. Tires were frozen and my good, honest customers came to me to buy a few tires to put away for future use. I told them of the order of freezing tires, but their answer was, 'Well, the government doesn't know you have those tires, so why don't you sell me a couple? We'll even pay list price for them.' Those were the days when you didn't get list price for anything. I wasn't a crook in those days, so I promptly turned them down. It was easy then. But, Allah! Then came gas rationing. Everybody scrambling around to find something in which to put away some extra gas. I helped many of them, I'll admit. Then came gas ration coupons . . .

° ° °

"SLEEPLESS NIGHTS, forgotten coupons, shortages, new systems. Then the expiration dates. 'Here, Oily, these expire the 21st and I don't need the gas right now so you take them and I'll get the gas later.' In a few days this situation might have developed: He drives in with a friend—'Oily, put eight gallons in Joe's car and take it off what you owe me.' Can't you feel me slipping? Then George drives up, 'Oily, I haven't got my C coupons for this period and I've got to get to my war plant job. Can you help me out for about a week?' You do and then comes the job of trying to make it look as though George had the coupons all the time. You tear them apart and paste them here and there wondering all the time if this is the one way they're going to catch you . . .

° ° °

"THE OPA HAS never made it very clear just how they expect war workers to get to their jobs during these lapses of coupon books. That's up to Oily. Then Homer drops in from the South Pacific. 'Put in that lousy five gallons that I'm allotted,' he says. You stand there with the hose in your hand and you know what he's thinking. Your eyes get a little watery and first thing you know you've got 10 gallons in his car. Not long ago the OPA insisted everybody indorse his coupons in ink in their own handwriting. No station could accept coupons unless they were properly indorsed. I didn't insist on every coupon being indorsed because I wanted to stay in business. Other station operators did. They were nice fellows — while they lasted. Honest, too, they were . . .

° ° °

"THEN THERE'S the fellow who drives up with, 'Put in five.' You do and comes the catch. He hands you a C2 coupon and has an A sticker on his car. 'I'm sorry, sir, I can't take a C2 coupon on an A sticker car,' you tell him. 'That's all I have,' he answers. You stand there dumfounded. Report him, you think? Yes, just like the bootlegger reports the hijacker. All I want to do, Cedric, and the OPA, too, is get back to worshipping my own God. I want to sleep nights, feel at ease. I'm tired of conniving, of trying to save my customers and my business . . .

° ° °

"WE SERVICE STATION men don't mind people coming in to use our rest rooms without a thought of making a purchase. We don't care if the same man asks us to put air in the same tire every day. We're not complaining because our business is off 50 per cent and gas is the same price it was four years ago. If a neighbor's wife is going to have a baby, we don't mind closing shop and rushing her to the hospital. We don't mind getting up in the middle of the night to help some drunk out of the ditch and driving him home. If your oil burner acts up, call us any time. We'll fix it. Make a scrap depot out of our stations for iron, rubber, paper, anything. That's okay because it helps the war effort . . .

° ° °

"BUT DON'T LET the government put all responsibility on us for teaching the public to indorse the coupons. We're business men, not law enforcement officers. We will co-operate in every way, but we still want to be business men, even though we can't fly an 'E' award over our establishments. Please, Mr. and Mrs. Public, and Mr. OPA, give us a chance to go straight. Then we can go home at night, look our wives straight in the eye and say, 'Honey, I love you,' without having that shifty look we've developed since gas rationing. Who did you say was the forgotten man? Now you know!"

N. Y. Auto Club and Stations Tilt Over 'Black Gas'

NPN News Bureau

NEW YORK—Service station operators and the Automobile Club of New York exchanged charges last week as to where the blame lies for the widespread black market in gasoline.

The row began when a group of gasoline retailers visited OPA offices here and accused half the drivers of the city of violating rationing regulations. The Automobile Club replied: "It is foolish to say that the motoring public, as a whole, supports either scarcity or an extortionate price."

The retailers, headed by James E. Frame, president of the Gasoline Stations Council of Metropolitan New York, said that 70% of the station operators who have been penalized by OPA for accepting unendorsed coupons had done so under pressure from their customers. OPA ordered all motorists to endorse their coupons with their automobile registration number or suffer a "penalty trip" to OPA offices.

The Automobile Club in disputing the dealers' charges replied: "The club urges OPA to stop filling stations from accepting coupons that are not endorsed. The club further asks the OPA to conduct whatever investigation may be necessary to convince it that the greater percentage of gasoline secured by motorists in the black market is the result of purchases without the presentation of any coupons whatsoever."

Little Big Inch Line Delivers First Product in Jersey

NPN News Bureau

NEW YORK—The Little Big Inch delivered its first product at the Linden, N. J., terminal March 3. An explosion and fire which occurred soon after the gasoline arrived put the line out of operation temporarily, but the stream was resumed March 4.

The 20-in. products line from Texas to the East Coast carried ahead a 100,000 bbl. slug of gasoline, followed by distillate fuel. The gasoline was pumped into storage tanks of War Emergency Pipelines, Inc., at Linden to settle before it can be used. The distillate will go to the immediate relief of the fuel oil shortage in the New York metropolitan area. Little Big Inch will have a capacity of 225,000 b/d of gasoline and 180,000 b/d of fuel oil.

PAW schedule for the line for March is:

American Oil Co., Carteret, N. J., 899,000 bbls.; Cities Service Oil Co., Tremley Point, N. J., 310,000 bbls.; Crown Central Petroleum, Elizabeth, 620,000 bbls.; Gulf Oil Corp., Staten Island, N. Y., 775,000 bbls.; Royal Petroleum Corp., Sewaren, N. J., 465,000 bbls.; Shell Oil Co., Sewaren, 465,000 bbls.; Sinclair Oil Corp., Tremley Point, 1,116,000 bbls.

Sights Early Relaxation of Illinois Well-Spacing Rule

Special to NPN

SPRINGFIELD, Ill. — PAW's verbal approval of relaxation of Illinois oil well spacing restrictions is expected to be made official about March 15 by a revision of Supplemental Order 5 to PAO-11, according to Robert M. Medill, director of the Illinois State Department of Mines and Minerals. Easing of restrictions, he said, will probably boost present Illinois daily production of 209,000 b/d by from 18,000 b/d to 25,000 b/d

Revision will permit one well to each 10 acres to base of Aux Vases regardless of depth, Mr. Medill said. This would void present 2500-ft. limit and permit drilling of two additional wells on each 40-acre tract or the deepening of shallow wells to Aux Vases for multiple completion. Order would also permit two lime wells to base of McClosky lime on each 40 acres unless PAW inserts provision that wells must be 800 ft. apart, which cannot be done unless wells are diagonally spaced.

According to Department of Mines and Minerals, proposed order will not affect wells in the Devonian or Trenton area.

The order received unofficial approval after representatives of state oil and gas conservation division and PAW regulation officials conferred with PAW Ickes on the matter, climaxing a two-year battle waged by the state of Illinois for such relaxation.

Fuel Oil Rationers Map Good-Will Plan for Midwest

NPN News Bureau

CHICAGO — OPA Washington, regional and district fuel oil rationing representatives, meeting at Region 6 headquarters here Feb. 28-29 and Mar. 1, boiled down data on the 1944-45 program, previously gathered at meetings with the industry. OPA district men are now due to return to their home grounds for further consultation with industry advisory committees.

"OPA and the fuel oil industry, at least here in the Middle West, are now working very closely," said Dale Larish, OPA regional fuel oil rationing officer. "There are still a good many points to be worked out, and conclusions drawn here must necessarily go to Washington to be harmonized with reports from other OPA regional offices, but the program is shaping up in good order."

Both OPA and the industry agreed that there should be an educational program to round off the rough edges where rationing contact is made with the public. If the ideas developed here so far are eventually combined with the national program for next season, frequent bulletins, picture slides and perhaps educational movies will be prepared for presentation to fuel oil delivery truck drivers and to workers in local boards.

Misunderstandings between drivers, the public and local ration boards, which have created friction in the past, are to be eliminated.

A recommendation from the Middle West probably will be that reapplications for allotments be made by fuel oil users before the opening of next season, which automatically would correct past errors in allotments, such as failure of the applicant to include ration for hot water, and in calculating the space to be heated. Re-applications, it is said, will also button up over allotments of No. 1 distillate.

It's possible that the mental calisthenics now necessary in calculating the footage space to be heated which precipitated many OPA-public battles in the early days of rationing, will be changed. Several new methods were suggested, among them was one for placing a ceiling on the maximum use of heating equipment, which it was said would greatly simplify matters.

Oil Heat Institute Rallies In New York Next Week

NPN News Bureau

CHICAGO — Reports received by Frank E. Spencer, chairman, distribution division, Oil Heat Institute, show that fuel oil men from Seattle, Kansas City, St. Louis, Chicago and from many cities over the Midwest as well as from the East Coast plan to attend the annual meeting of the institute at the Commodore Hotel in New York March 12-14.

OPA's fuel oil rationing plans for 1944-45 season will be one of the leading subjects for discussion. Since the convention in Chicago last year the fuel oil industry has overhauled itself and strengthened its association organization.

Before the New York session the Oil Heat Institute of New England will hold its annual meeting in Boston on March 10, with speakers from the Midwest taking a prominent part in the program. Mr. Spencer heads the list, which includes Warren C. Platt, editor of NATIONAL PETROLEUM NEWS; C. E. Lewis, president of O. H. I. and Frank W. Lovejoy of Socony-Vacuum.

FUEL FOR INVASION SUPPLY LINE. Columns of American-built tank cars assembled by British civilian labor and American engineering units for use by Allied invasion forces occupy a large area of a railroad yard in England

WAR OIL NEWS *from* WASHINGTON

HERBERT YOCOM *Bureau Chief*
NATIONAL PRESS BLDG.
NATIONAL 3477

Warns Auto Pools: Full Loads, Or Coupon Cut Might Hurt

NPN News Bureau

WASHINGTON — Unless plant transportation committees do the most efficient possible job of making war plant car-sharing work to conserve gasoline, they will be unable to recover any mileage lost through possible coupon cuts, OPA has warned.

OPA is not contemplating any cut in gasoline coupon values at this time, but it is emphasized that gasoline is a critically short material and every possible measure will have to be applied in coming months to stretch the supply.

In many war plants, plant transportation committees have achieved and maintained a highly satisfactory record, OPA said, but in others they have not. Under the tightened car-sharing rules, only car pools that meet definite standards will be allowed to recover mileage lost through cuts in coupon values, if such cuts become necessary.

Under the old rules, workers at any plant served by a transportation committee are eligible for restoration of lost mileage. In the future, this consideration will be given only to transportation committees, or to individual drivers, whose cars are actually being used to capacity.

A plant-wide car-sharing operation for which restoration of mileage is requested must show an average load of three and one-half persons per car going to and from the main shift. If the plant's overall car-sharing record does not meet this standard, an individual worker may still regain his necessary mileage if his own car carries three workers in addition to the driver, or, in case of a smaller car, if it is loaded to capacity.

The policy formalized by the new rules was outlined last November by OPA Chief Bowles.

WPB Releases 1527 Trucks

NPN News Bureau

WASHINGTON — A total of 1527 vehicles was released under the truck rationing program Feb. 20-26, WPB announced March 2. Total included 243 light, 584 medium, 284 heavy trucks, 371 trailers, and 45 third-axle attachments.

Publicist Who Charted U. S.-Wide Oil Saving And Four Industry Veterans Enlist In OPA

NPN News Bureau

WASHINGTON — A. R. Whitman, formerly deputy director of the Office of War Information in charge of OWI's gasoline and fuel oil information programs, this week became director of OPA's fuel rationing division.

Mr. Whitman succeeds Dr. Joel Dean, who has agreed to remain until April 1 as Mr. Whitman's advisor and consultant. Also leaving OPA on April 1 along with Dr. Dean is Laurence C. Vass, head of the fuel oil rationing branch, who will be replaced by one of four oil men who come direct to OPA from the industry. Both Dr. Dean and Mr. Vass are expected to make an announcement soon regarding their future plans.

Mr. Whitman's appointment as OPA fuel rationing director was made by Col. Bryan Houston, OPA Chief Bowles' deputy in charge of rationing, who simultaneously reported the addition to OPA's rationing staff of four men all of whom held top jobs with oil companies and have had wide experience in oil marketing and distribution.

Well-Grounded Quartet

The four, who were selected by Col. Houston after he had asked leading men in the industry for personal recommendations, are:

L. V. Nicholas, independent Indiana oil operator who formerly was head of the Warner-Quinlan Co., a leading distributor of oil products in the New York metropolitan area, and a consultant to the Cities Service Co.

Harry Spears, trained in the oil industry, who at one time headed his own gasoline station inspection service. He has also served on a local war price and rationing board and thus brings to OPA national headquarters a practical experience of how the agency operates at the consumer level.

William E. Rowe, manager of Cities Service Co.'s Boston district. Mr. Rowe has a practical background of fuel oil experience and has been active in cooperative work done by the Petroleum Industry with PAW, as a member of the Dist. 1 Marketing Committee, the Office of Defense Transportation and OPA.

Q. W. Regestein, sales manager in New Jersey for the Socony-Vacuum Oil Co., who is intimately acquainted with industry marketing and distribution problems.

These four men, said Col. Houston, are thoroughly grounded in oil industry work pertaining to fuel oil, gasoline, petroleum products and automotive products. Two, he added, will probably be stationed in the fuel division to work with Mr. Whitman and two others will operate as consultants under the direction of Charles A. Phillips, director of the automotive supplies rationing division, which handles rationing of gasoline, automobiles, tires, and other related products. It is likely that Mr. Nicholas will take over the fuel oil branch under Mr. Whitman.

Col. Houston said he was pleased to announce the appointments, all of which have the hearty approval of OPA Chief Bowles.

"Mr. Bowles has repeatedly stressed the importance of placing industry men in important executive capacities in OPA," he said. "The four coming here directly from industry are taking a sharp cut in compensation. Mr. Whitman, of course, had already taken such a cut with OWI.

"I put Mr. Whitman at the head of the fuel rationing division because his

A. R. Whitman . . . succeeds Joel Dean as fuel rationing director

training in several fields qualifies him exceptionally well. He understands war agency procedure and knows his way about in government as well as anybody I know. He will not require seasoning and is an able administrator and personnel man. He knows how industry operates and can help both OPA and industry in more effectively discharging their wartime responsibilities. He also knows how homeowners feel about rationing and can help us to fit fuel oil rationing as conveniently as possible to consumer habits and trade customs.

"Each Man an Authority"

"Mr. Whitman will have at his elbow some of the ablest men in the petroleum industry. The four new OPA selectees are industry trained. Each is an authority in his field. They have been recommended to me not only by their own companies, but also by competitive companies. The industry itself has cooperated splendidly."

Mr. Whitman joined OWI in February, 1943, as a consultant. He later became a program manager and since last

August he has served as deputy director in charge of OWI programs covering fuel oil and gasoline. He was instrumental last fall in getting all war agencies dealing with petroleum—PAW, ODT, OPA and others—to agree on facts and figures pertaining to shortages of gasoline and fuel oil.

These data have been written into a brochure which forms the basis for an advertising campaign, developed by the McCann-Erickson advertising agency in New York, which was chosen by PIWC's products conservation committee to work up a down-to-earth workable program which would be carried out by oil companies themselves, from Maine to California.

"His work at OWI," said Col. Houston, "required the closest kind of cooperation, between OWI, the Office of Petroleum Administrator, Office of Defense Transportation, Office of the Rubber Director, and OPA."

Col. Houston met Mr. Whitman about 10 years ago when Whitman was in the employ of Benton & Bowles, New York advertising agency from which OPA Chief Bowles came to OPA. Whitman started as an office boy and rose to a vice presidency.

It was at Col. Houston's suggestion that he was invited to fill the OPA vacancy caused by Dr. Dean's resignation and Mr. Bowles approved the appointment of a man who, before entering government service, had worked with him for 10 years.

"It is with regret that I have accepted the resignation of Mr. Dean and Mr. Vass," Col. Houston said. "Both have done outstanding jobs."

War Department Tightens Rule On Army Use of 80-Octane

NPN News Bureau

WASHINGTON — The War Department's Fuels and Lubricants Committee last week moved further to tighten military consumption of 80-octane all-purpose gasoline within the U. S.

A new supply bulletin, which strictly defines the circumstances under which the fuel may be used, has been sent to all posts, camps and stations within the continental limits of the U. S.

Combat vehicles—wheeled, half-track or full-track armored vehicles designed for fighting functions—must use this high grade motor fuel at all times because their engines are designed for gasoline of 80-octane number, the War Department pointed out. On maneuvers in this country, where battle conditions are simulated as nearly as possible, combat fuel is to be used in all equipment not exempted by the commanding generals of the Army Ground Forces, Army Air Forces or Army Service Forces.

The only other authorized uses of 80-octane in the U. S. are in landing vehicles, amphibious trucks, marine equipment when prescribed by the responsible technical service, experimental or research work on new or redesigned equipment and captured enemy materiel.

East Coast Fuel Oil Famine Is Headed Off, PIWC Economists Say in U. S.-Wide Report

NPN News Bureau

WASHINGTON — The East Coast outlook is better than a month ago, and the critical situation in the New York area should pass with regular operation of the 20-in. products pipeline, the Petroleum Industry War Council economics committee, with Dr. Robert E. Wilson of Pan American Petroleum & Transport Co. as chairman, reported at the council's monthly meeting last week.

The improvement is due to several factors, the committee's report said, which were considered in recommendations made by the group last month. They were listed as:

1. Improved tank car turn-around time, brought about by efforts of both the industry and the railroads.

2. Reduction of recent tendency to requisition more and more cars for specific military movement.

3. Availability of a few more tankers during March. It is now indicated that about 50,000 b/d additional dirty tanker capacity will be made available to the East Coast during this month.

4. Granting by WPB, at ODT's request, of a temporary priority on all applications for tractors for tank trucks which are approved by ODT. Under the new procedure all such applications approved by ODT's tank truck section during the 30-day period ending March 3, are to be handled by tractor manufacturers ahead of applications of other motor carriers.

5. Movements of drummed kerosine in box cars have sharply increased since PIWC's February meeting, averaging about 7000 b/d during the week of Feb. 12.

The committee reported that the Little Big Inch 20-in. line, on completion, was expected to pour into the East an average of between 125,000 and 150,000 b/d of heating oils during March and said that it would be necessary for the line to meet these rates if home-heating oils are to continue available along the Atlantic seaboard.

"If the line can live up to the above schedule," the committee added, "the worst in the situation will be passed during the first week of March. Any failure to meet this level, and at the dates indicated, will, however, immediately be reflected in a shortage particularly in the New York area, since a considerable portion of the inventories reported under the Gas Oil and Distillate Fuel Oil category is composed of Navy diesel oils and stored for future delivery on government contracts, the title on which has not yet passed to the government."

The committee's report was in two sections: One covered the general situation in each of the 5 PAW districts, and the other indicated in some detail the 1943 monthly tank-car transportation performance (Detailed story on the tank car report will be carried in next week's NPN.)

In its discussion of Dist. 2, the committee reported that the basic problem was still crude supply which has been relieved to some extent by removal of restrictions on payment of extra transportation costs under the West Texas compensatory plan and recent extension of the compensatory principle to include crude from any other sources outside of West Texas that may be made available to Dist. 2 refiners.

However, the general transportation situation will slow up these plans, it was pointed out, since military demand and the current East Coast trade shortage will take most of the available transportation facilities eastward. Thus, crude which was to have been fed industry pipelines in the Mid-West by way of the Big Inch, is now moving straight to Dist. 1.

Dist. 2 cannot maintain record crude runs to still, established recently, for more than a few weeks, the committee added, unless additional crude is made available. Crude stocks there have been falling, even during a period when they should have been increasing in anticipation of larger Great Lakes shipments in the near future.

In Dist. 3, the committee reported crude production averaged about 2,-

March 20 Is Report Day For Prices in MPR 510

NPN News Bureau

WASHINGTON—Maximum Price Regulation 510, effective Feb. 19, has one feature which is important immediately to all refiners, blenders and compounders. It requires a report within 30 days after its effective date.

By the terms of Section 5 (b) refiners, blenders and compounders of the products covered by MPR 510 are each required within 30 days after Feb. 19, to file with OPA in Washington, in duplicate, a list of "selling prices including therewith his written statement of discounts and price differentials which he supplies to his salesmen, on all of such commodities which he produces. The list shall consist of the prices which he customarily publishes for use of his sales department, customers or distributors. It need not include prices for individual products and formulas which are not customarily published in such manner."

There is a caution in the paragraph which should not be overlooked. It is stated: "The filing of such prices shall not constitute their establishment as maximum selling prices nor their approval as such by the Office of Price Administration".

500,000 bbl. during January and February's may prove higher. This has caused a large stock buildup in addition to the 10,000,000-bbl. accumulation in the last quarter of 1943 with the result that PAW's March certification was reduced 53,000 b/d.

It was pointed out that the stock buildup and curtailment factors are only temporary, resulting from a shortage of transportation into Dist. 2 and some delay in completing refinery capacity in Dist. 3. Second quarter crude demand will probably cause some draft on stocks in the area.

Product stocks are about at program levels, and completion of Little Big Inch and somewhat greater tanker availability should take care of increased product production during the second quarter and release some tank cars for hauling crude to Dist. 2, the committee said.

Dist. 2 Refineries Idle

Dist. 4 crude production, it reported, averaged about 120,000 b/d during January with the trend slightly higher recently but still below what could be produced if arrangements were made to make the crude available to Dist. 2 refiners, and within the district. However, it was pointed out that compensatory payment plans, such as recently approved by DSC on movements from Texas to Dist. 2 would have to be worked out.

About 20,000 b/d refining capacity is now idle with all refiners processing sweet crude only and at less than capacity because of the sweet crude shortage. The committee said completion of the two approved pipeline projects—one from Elk Basin to Billings and the other from Elk Basin to Casper—should make black oil available at reasonable cost to many refiners who are now not operating at capacity.

Oil Wells Drilled at Highest Rate Since '41, PAW Tells PIWC, but Cites Factors of Lag

NPN News Bureau

WASHINGTON—Number of wells drilling on Feb. 1 was the highest on that date for the last four years, PAW's production division reported to PIWC this week.

Though the acceleration trend continues, some phases of production operations did not measure up to anticipated levels in January. Both well completions and crude oil production were less than the average maintained during the last quarter of 1943, but the report said this could be attributed primarily to natural seasonal variations.

Average number of wells completed per month by each rotary rig running dropped from a maximum of about 2.5 in the latter part of 1940 to a minimum of about 1.5 during the same period of 1943, PAW reported. Assuming that average depth of wells drilling remained stationary, this would mean a 40% drop in efficiency, but actually, it was pointed out, the average depth of wells drilled has increased from 2870 ft. in 1940 to 3041 feet for the first half of 1943, so that the decrease is less.

PAW reported that the general outlook as regards materials and equipment continues to improve, with gratifying increases made in production of such former bottleneck items as rock bits, tool joints, rotary equipment, and pumping units. Other items, however, including trucks, internal combustion engines, and replacement parts for both still constitute major problems in production operations. Lumber, which has not been on the critical list up to now, appears to be nearing a point which may develop into a serious problem.

The production division said the manpower problem has become tight, and can be expected to reach the most difficult period during the coming six months. No improvement was seen until the end of the war.

In addition to the drafting of fathers, the division's report said there was a critical problem of retaining technical and semi-technical men in various types of exploratory crews. "This problem," it added, "is further accentuated by the fact that foreign exploration and development will make an additional call upon manpower."

It appears, the report warned that every man between 18 and 25 capable of passing a physical examination "will be inducted regardless of the type of work he is performing. The exceptions to this will be very rare."

PAW Production Director Knowlton said that he had found that the sentiment of the Dist. 2 production committee was unchanged from the previous meeting's view that PAO 11 drilling restrictions should not be revoked outright until manpower and materials were more readily available.

Mr. Knowlton said that since the February meeting certain objections had been received to the proposal by Dist. 3 that PAO 11 be amended to permit use of material for equidistant offsets across property lines. He added that it appears advisable that further consideration be given the proposal.

The Dist. 2 committee, he reported, has voted approval of the PAW proposal to revise Supp. Order No. 5 to PAO 11 which would afford 10-acre spacing for sand wells to the base of the Aux Vases and 20-acre spacing for all wells lower than the Aux Vases to the base of the McClosky lime. The revision is now being perfected, he said and will be issued soon.

Knowlton reported that the Dist. 1 secondary recovery subcommittee had attempted to include in its report reserves and production estimates for various price increases but had been unable to derive reliable figures. However, the committee included in its report producible reserves in the Allegany and Bradford fields at various price increments as follows:

Allegany Field: At current price of $3.00 per barrel, the gross return from acreage of the quality now being developed (average) is about $8250 per acre. For this same gross return, there are producible reserves in the field of:

53,000,000 Bbls. @ $3.50 per bbl.
63,500,000 Bbls. @ 4.00 per bbl.
73,000,000 Bbls. @ 4.50 per bbl.

Bradford Field: At current price of $3.00 per barrel, the present gross return is about $10,000 per acre. In this same gross return, there are producible reserves in the field of:

121,000,000 Bbls. @ $3.50 per bbl.
133,000,000 Bbls. @ 4.00 per bbl.
139,000,000 Bbls. @ 4.50 per bbl.

The report of the Dist. 2 Temporary Subcommittee on Secondary Recovery, comprising a consolidation of the reports of the temporary

Senator Hails 'Great Petroleum War'

NPN News Bureau

WASHINGTON—In a speech calling petroleum products "the lifeblood of modern day mobile warfare," Sen. Bridges of New Hampshire told the Senate last week that, thanks to the co-operation of the oil industry, the Army's gasoline reserve storage program was saving the government more than $3,000,000 a year.

Industry, working with the quartermaster general, has helped provide these reserves at strategic points throughout continental United States, Sen. Bridges said, and is maintaining them as an integral part of its reserve working levels. This eliminates payment of rental charges on storage facilities and permits gasoline earmarked for the Army to be regularly used and replaced by industry "and not left idle to deteriorate in quality."

An additional $200,000 or so in transportation costs will be saved annually, the senator continued, by an improved method for inviting bids and awarding gasoline contracts, with still further savings resulting when the same method is applied to fuel oil.

"World War II, now variously titled total war, global war, blitzkrieg, and quartermaster's war, may well be titled by future historians the Great Petroleum War", said Sen. Bridges. "The soldier of today, whether he wears the uniform of the Allies or of the Axis, is so totally dependent on petroleum products in some form that the measure of any army's success can virtually be gaged by reference to its petroleum supplies.

"The American war machine, resting as it does on the foundation of the country that leads the world both in petroleum resources and mechanical production, is proportionately the most highly mechanized in the world. As a result, its success or failure is inextricably bound to the adequacy and efficiency of its petroleum supply."

subcommittees on secondary recovery for the various states of Dist. 2, submitted Sept. 9, 1943, contained the following reserves and production estimates of secondary oil available with ceiling increases of 25 cents, 50 cents, and 75 cents per barrel:

Reserve of Present Operating Projects	166,225,000 bbls.
Total Reserve at Present Oil Price	371,405,000 bbls.
Total Reserve @ 25c Price Increase	505,385,000 bbls.
Total Reserve @ 50c Price Increase	674,948,000 bbls.
Total Reserve @ 75c Price Increase	919,259,000 bbls.

Nineteen states had exploratory well completions during the month of January, PIWC was informed. Texas, Kansas, and Illinois again took the lead in total number of exploratory completions, with 75, 36, and 24, respectively.

In January there were 30 oil and nine gas discoveries, or two more than in December. Ten states reported discoveries in January compared with 12 in December. Of the 10, Texas led with 11, while Kansas was second with 7.

Summary of Well Data

Appended to Mr. Knowlton's report was the following summary:

COMPLETIONS

Total Completions January, 1944	1,680
Total Completions January, 1943	1,272
Percent of Completions Year Ago	132.1

Total Well Completions First Month of 1944 Compared With Same Period 1943, 1942 and 1941:

Total U. S. (Districts)	% 1943	% 1942	% 1941
	132.1	74.0	75.0
1	113.5	91.9	108.1
2	135.5	82.2	78.7
3	137.3	52.3	54.3
4	115.8	151.7	104.8
5	156.0	134.0	124.6

DRILLING

Total Wells Drilling As of Feb. 1

Total U. S. (Districts)	1944	1943	1942	1941
	2,679	1,914	2,659	2,646
1	322	292	472	428
2	1,062	831	931	943
3	901	620	1,056	1,063
4	106	53	49	61
5	288	118	151	151

Rotary Rigs Running January Monthly Average

Total U. S. (Districts)	1944	1943	1942	1941
	1,294	713	750	917
2	324	260	150	201
3	772	376	513	592
4	59	16	13	16
5	139	61	74	108

All 'E' and 'R' Coupons Get Endorsement Next Week

NPN News Bureau

WASHINGTON—After March 15, every non-highway gasoline user will have to endorse "E" and "R" coupons exchanged for gasoline whether the transaction takes place on his premises or at a filling station or bulk plant, OPA announced March 7.

Endorsers must put name and address on "E" and "R" coupons, but to make the task easier, OPA has provided that this need be done only once on each strip or block of coupons handed to the gasoline seller as a unit or on one coupon of the strip or block. When coupons are presented separately, each must be endorsed.

CONGRESS LAST HURDLE FOR ARAB OIL DEAL

(*Continued from p.* 3)

know about the Arabian project.

Another was that he didn't know how the pipeline deal was "going to work out economically." "That isn't down my alley," he said, adding: "My relationship to oil is on account of the war and it's my job to see that we have, during the war, regardless of how long it may take to win it, enough oil in the right places. So far we haven't fallen down on that, and we have had to take a chance."

As for the contention of independent oil men that South American oil will lose its European markets and be forced to seek outlets in the U. S., the secretary said he thought the oil industry would be "able to solve all such problems after the war as may arise in connection with an increased supply produced over there in the Middle East or anywhere else in the world."

"That is going to happen anyway," he continued, "regardless of the attitude the government takes. People that own that oil aren't going to be content to hold it under ground for 50 to 100 years in order to accommodate oil from some other part of the world. And if the oil companies wanted to do that, the present oil companies have the concessions. I can't quite see the sovereignty (meaning King Ibn Saud of Saudi Arabia) permitting that to be done. They want revenue which can come only when oil is taken into commerce."

Asked if that wasn't all the more reason for the companies building the Arabian line themselves, especially if it were as good a proposition as was made out, Mr. Ickes said he believed that was "debatable." "You might have said the same about the Big Inch, but the government built that," he commented.

Breach Is Made Plain

Mr. Ickes's remarks, made at his weekly press conference, served to point up the breach between himself and industry—a breach that became complete with the public unveiling by P.I.W.C. an hour later of the preliminary report of its National Oil Policy Committee.

The unveiling was before a gathering of some 30 Washington newsmen and radio reporters and found the industry —represented by P.I.W.C. Chairman W. R. Boyd, Jr., P.I.W.C. Policy Committee Chairman John A. Brown, Ralph K. Zook of I.P.A.A., and George A. Hill of Houston Oil Co. of Texas—in a fighting mood, apparently eager and even anxious to give the Administration the finish fight it seemingly invites before the Congress.

Mr. Brown regarded the trans-Arabian pipeline as only the first of a series of such government projects.

Mr. Hill, noting that it would be built in one of the world's "most explosive areas," called the line a "breeder of future wars," while Mr. Zook, expressing the fears of independent oil men, asserted:

"We have always said that we could take care of ourselves in a rough and tumble fight with the majors. We can't, however, take care of ourselves when the U. S. government puts its money up against us, and that's what's happening today."

As to whether Congress will pick up the gauntlet thrown down by Mr. Ickes, there were indications that the Senate might take final action this week on the Moore-Brewster resolution proposing an investigation of the whole oil problem for the purpose of formulating a long-range oil policy for the U. S.

Already approved by the Senate Commerce Committee, the resolution (S. Res. 253) has been reposing for some two weeks in the committee on Audit and Control, whose chairman is New Deal Senator Lucas, of Illinois. Oil-state Senators were moving to break it loose, however, and were hopeful that the committee would send the resolution to the floor for a vote within a very few days—perhaps even before this issue of NPN is in the mails.

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MOFFETT SLAMS ICKES

(*Continued from p.* 3)

and manpower approximately half way around the world, if they project a 24-inch pipeline of 1200 miles, it would require approximately 400,000 tons of steel, and with the two refineries, a huge additional quantity of material, manpower, and shipping space. This while we are at war. It does not help the war effort but is strictly a commercial operation.

Ships Cheapest Transport

"Every oil man should know that the cheapest form of transportation of oil is by ship. I defy any oil man to prove that I am wrong.

"If my memory serves me correctly, it would cost 3c per barrel per hundred miles, or 36c per barrel, to deliver crude oil to Alexandria. We, further, know that in the refining process, 10% of the barrel is used in the form of fuel for refining. We also know that there is always a loss in refining due to gas loss and non-merchantable products, such as pitch. So, therefore, it would appear that at the terminal of a line, having passed through the refinery at Alexandria, that we recovered but 85% of the barrel in finished products, and, therefore, instead of costing 36c per barrel, the actual transport charge on the finished products available at Alexandria would be in the neighborhood of 42c. . . . .

"A Senate-House committee should be appointed to determine if the American taxpayer and public should be called upon to finance what appears to be an unjustified venture by bureaucracy."

PIPELINES—*Views of the Industry's Problems a*

Washington— *Ickes Apparently Thinks Foreign Oil a Closed Issue* —By Herbert Yocom

WASHINGTON — It is now amply evident that when Secretary Ickes said he would welcome submission by P. I. W. C. of its recommendations as to what our national oil policy should be, he had no intention whatsoever of allowing those recommendations to influence the Administration decision in the Arabian pipeline venture even one little bit.

Mr. Yocom

With some phases of the report of the council's policy committee it may be found later that the secretary is in complete agreement. But with that portion of it dealing with government participation in foreign oil ventures—never!

Judging by the Ickes' attitude, as put on public display at his weekly press conference, that end of the business is now, always has been, and will continue to be outside the purview of the oil industry. In other words the little matter of whether the U. S. government is to enter into the oil transportation business in foreign lands is a closed issue so far as the secretary is concerned. Anyone who thinks otherwise is just wasting his time, and that applies to members of the Congress as well as to American oil men.

The situation is one that calls for a full and frank statement from the Administration—yet that is something that even the honest, usually out-spoken, perfectly candid Secretary of the Interior seems to think no one is entitled to.

He tells his press conference, for instance, that he is going ahead until stopped; meets the charge that the Arabian deal puts government into the oil business with the retort that he has an "honest difference of opinion" with the industry as to that, and then dismisses the specific objections raised by James A. Moffett on the grounds that Mr. Moffett isn't entitled to be taken seriously.

This being the Ickes state of mind, it becomes all the more essential that the Senate proceed to its proposed consideration of a national policy with all possible haste. For it is apparent that only through such a study and investigation as is proposed by the Moore-Brewster resolution can the executive branch be made to account for its actions in Arabia; be made to disclose and to justify, if it can, the reasons which impel this radical departure from American foreign policy without the prior approval of the Congress.

* * *

The Whitman Appointment

The appointment of A. R. Whitman to the post of fuel oil rationing chief, succeeding Prof. Joel Dean, should put OPA another long stride ahead in its effort to reduce the rationing of scarce commodities to a practical, commonsense basis (*See p.* 8).

It is true that Mr. Whitman has no oil background, but that doesn't really matter so much for Col. Bryan Houston is surrounding him with practical oil men who can be counted upon to keep him straight on that end of the business. The important thing, the big thing, is that he brings to his new job an intimate acquaintance with the public mind; a knowledge that rationing regulations must be simple, straightforward, direct if they are to be understood and accepted by the consumer. And that is something that no one could ever say of his predecessor.

Fuel oil men also should find in Mr. Whitman a public official quite different from Prof. Dean. He will deal with them openly and frankly, and listen and pay heed to the practical suggestions they may have to offer. There should be no more such occurrences as that of early last summer when Prof. Dean listened all day to the advice of the fuel oil advisory panel and then came out, a day or two later, with his own 1943-4 program, which he had not changed so much as a particle.

* * *

Suggestion for Mr. Ickes

After having read Wallace E. Pratt's booklet, "Oil in the Earth," this writer commends it to Secretary Ickes in the belief that he will find it highly educational.

Atlantic Coast— *Talk Point Barrow Oil—Nearer Than Arabia and Safer* —By Henry Ozanne

NEW YORK—Industry fear is widely voiced here that the proposed trans-Arabian pipeline is a threat to the future peace of the U. S., and several high oil executives have told this writer that if the line is constructed by and owned by the government, it probably will be the occasion for involving this nation in a new international conflict in the Middle East.

Mr. Ozanne

Dr. Joseph E. Pogue's article in the March *Atlantic Monthly* focuses attention on this aspect of the Arabian adventure. Dr. Pogue, a petroleum economist and vice-president of the Chase National Bank, writing under the title, "Must an Oil War Follow This War?", says: "War-engendered attitudes on oil . . . create a danger that this country may adopt a foreign oil policy which will not only impair the functioning of the oil industry here and abroad, but will also lead to international complications which might even produce a third world war."

The same warning came from P.I.W.C. wherein 55 oil companies see in the pipeline project the threat of international conflict without congressional authority. P.I.W.C.'s description was "a possible breeder of future wars."

One oil executive put the problem this way: "How is it possible to establish government property in Saudi Arabia—or in any other country—without at the same time setting up the necessary naval and air bases to protect that property? If we are going to protect the line, we must be prepared to protect it against the most powerful nations, not merely against desert tribesmen."

Many industry leaders point out that even if the argument based on scarcity of U. S. reserves is sound (and there is much controversy over that issue), the government is not necessarily justified in going 4000 miles away in its search for new reserves.

One of the alternatives to Saudi Arabia that is proposed is the Point Barrow, Alaska, Navy reserve. Obviously if adequate oil could be found at Point Barrow, the question of defense would be much simpler than in Arabia, and by eliminating U. S. "invasion" of other countries the threat of future wars would be removed.

Industry leaders are asking: If our reserves are as critically short as Mr. Ickes says they are, why isn't it natural to try Point Barrow first? On Feb. 27, 1923, the government set aside 35,000 square miles—22,400,000 acres—around Point Barrow as a naval reserve. Many geologists have termed this reserve one of the most promising on earth. Oil has been seeping out of the earth there for 21 years, one of the most direct and significant signs of the area's worth.

At the present time, one industry leader told this writer, 8-foot streams of

oil seepage are pouring out of the ground.

There are no estimates of reserves there because no wells have been drilled, but on the evidence of such seepage and geological evidence it would not be surprising if this Point Barrow reserve proved as rich as continental U. S. fields. Rep. Poulson of California recently presented before the House of Representatives some of the reports on this reserve by William T. Foran, well-known geologist, who says he notes that porosity, sand and shale conditions are well suited to the migration and pooling of oil. "His analysis of the residue of the seepage oil," said Rep. Poulson, "suggests that it is comparable to Gulf Coast crude and quite similar to crude from the Blue Ridge field of Texas."

While fairly extensive exploration has been carried on in other parts of Alaska, "not one exploratory well drill was put down to enable the U. S. Navy to find out just how much oil it had in this vast reserve," says Rep. Poulson. "Failure to develop that Barrow reserve," he adds, "cost the taxpayers of this country $130,000,000. That is what we paid for the Canol project."

Industry experts have stated that the Barrow reserve can be developed. If it should prove to be a rich field, it would be strategically located. Fairbanks, Alaska, is on the straight line of the Army Air Transport Command route to China and India. After the war that route will link us with Australia and the Far East.

Even for this war, some industry officials say, the field might be turned to military importance, while the Saudi Arabian plan, requiring 18 to 24 months to complete, cannot be projected as a current war measure.

At present no industry leader is affirming that Point Barrow is sure to prove a petroleum source, but, with all the indications up there and with the definite hazards facing us in the Middle East, many are asking why not first see what we've got in our own backyard before jumping over the fence into somebody else's yard?

Midwest— *Midwest Jobbers Making Quick Jumps as Supply Picture Changes* —By Earl Lamm

CHICAGO—Last week we commented on the unusual wartime situations of several independent jobbers in the Middle West who were discontinuing their past refinery hook-ups and changing to other sources of supply. It seems that the number of such jobbers who are making new supply connections is increasing, particularly in the Iowa-Nebraska-Missouri area. Here are some:

Mr. Lamm

C. E. Middleton of the M. & R. Oil Co. at Modale, Ia., tells us that his supply needs will be taken care of under his contract with Globe Oil & Refining Co. until it expires on April 24. His supplier told him some time ago that Globe Oil had sold out, he said, adding that the Kansas City co-op which bought the Globe plant at McPherson, Kan., where he had been obtaining products, had never solicited him for renewal of the contract but had sent word indirectly that they had all the accounts they could handle.

Mr. Middleton has made no new connection but said he had been offered four or five propositions from other suppliers. "But they don't seem able to transport products into this district because the transports need tires and repair parts," he said. Socony-Vacuum has taken over nearly all former National Refining Co. accounts in this part of Iowa."

Pierre Brookfield of the Brookfield Oil Co. at Southerland, Ia., said he received a registered letter from National Refining Co. in December telling him that they had sold out and that his supply contract was cancelled as of Jan. 1, 1944. However, he said he had foreseen that this might happen and had already worked out a new supply contract with Cities Service so that he has had no interruption in supplies. His supply of both gasoline and fuel oil is ample, he said.

Down in Springfield, Mo., Gustav Wickman, vice-president and general manager of Merchants Ice & Fuel Co., said that he had been buying Nos. 1, 2 and 3 fuel oil from National for two years without needing a contract as their truck driver delivered to him regularly until about the middle of January when deliveries stopped. He said he wrote several letters to the Consumers Co-Operative in Kansas City, which had bought the National refinery at Coffeyville.

"I finally got a reply that the government was taking all fuel oil and making aviation gasoline out of it," he said, "and that there wasn't enough left to go 'round."

Mr. Wickman then said he called on the supply and distribution committee in Chicago. "They were very helpful and located some emergency supplies for me," he said. This tided him over temporarily. Since then he has found other refiners and is doing all right, buying wherever he can get products. "I'll get by this fuel oil heating season," he anticipated, "but next season is going to get tough unless I can make a contract with some one. I sell from 80,000 to 90,000 gal. of fuel oil a month during December, January and February."

He was not very complimentary toward the co-op for having cut off his supplies and questioned the reason given for doing so but said he did not know the real cause. "It was not bad credit, though," he said, "for I discount all bills in 10 days."

O. B. Korte, manager of the Galena Farmers Exchange, a co-op at Galena, Ill., said that he made a new contract with Skelly Oil Co. on Feb. 23, as National Refining Co. had told him about two weeks previous that they had sold everything and were unable to supply him, even though he had an unexpired contract. He was trying to get a tank car of kerosine as National told him they didn't have it.

It is evident from these reports that sale of the National and Globe refineries unseated a sizeable number of independent petroleum marketers over a wide area, as most of the jobbers interviewed told of other jobbers who either had already or were soon going to be forced to seek new supply sources.

It will be interesting to watch other effects of this large-scale switching of accounts when they are supposed to be frozen under PAW Directive 65, zoning supply and distribution in Dist. 2.

Some of the jobbers mentioned that it was their understanding that they were supposed to obtain supplies from the same refinery they had been buying from regardless of who owned it, but were unable to do so.

However, it is apparent that Dist. 2 industry committee is trying to obtain compliance, and without success so far in some instances mentioned. With this happening, what will take place if a gasoline allocations order is issued by PAW for Dist. 2? And carrying the question back further, PAW Directive 64, companion order for Directive 65, allocates crude oil to Middle Western refineries since there is a shortage. What about that? Will the co-op continue to receive the same volume of crude as was run by the refineries when they were supplying all of the jobber accounts that have been cut off? And where are the refineries that have taken on the new outlets getting the crude to make the necessary products? Granted fully that someone should take care of the jobbers in order that their customers may in turn be served. There has been no announced change in crude oil allocations although Directive 64 some months ago was called only a "hunting license" for more crude by some refiners.

The Week's Orders

(Issued Feb. 26-March 4, 1944)

PAW—Petroleum Administration for War

Wire Directive 2-29-44 of Dist. 2 Director of Refining—Percentage yield restrictions removed

PDO 14, as am. 2-26-44—Preferential deliveries of gasoline and fuel oil

OPA—Office of Price Administration
Prices

MPR 88, Am. 1—Industrial Naphthas and solvents removed from MPR 88's jurisdiction

MPR 323, Am. 7—Asphalt prices amended

MPR 510, Am. 1—Industrial naphthas and solvents now under MPR 510

Rationing

RO 1A, Am. 70—Eligibility for Tire Allotments

WPB—War Production Board

L-79, Interp. 2—L-79 compliance does not excuse RO 9A non-compliance

L-100, Revocation—Superseded by M-293 and L-123

L-125, as am. 2-26-44—Restrictions on compressors, heat exchangers, pressure vessels

L-172, Revocation — Superseded by M-293 and L-123

M-293, Interp. 1, Revocation—Forms for Z products

Direction 1—Scheduling procedure

Direction 2—Applicability of Tables 3 to 15

CMP 5, as am. 2-26-44—MRO supplies

CMP 9A, Direction 2—Dollar limitations on installation material

Pri. Reg. 3, as am. 2-26-44—Application of preference ratings

Pri. Reg. 18, as am. 2-24-44—Frozen schedules

WMC—War Manpower Commission

Reclassification labor market areas

Revised list essential activities

Digest of Week's War-Oil Orders

Petroleum Administration for War

PERCENTAGE YIELD RESTRICTIONS REMOVED—2-24 District 2 Refining Director Wire Directive—Civilian product yield restrictions imposed by previous directive telegrams removed, except request for increased kerosine production, which automatically terminates 4-1-44. Still in force is requirement of maximum volume of Group I first preference and critical war products and certain volumes of Groups II and III products. Issued 2-29-44.

PREFERENTIAL DELIVERIES OF GASOLINE AND FUEL OIL—PDO 14, as. am. 2-26-44 — Required delivery of gasoline to specified military agencies by suppliers extended to include fuel oil. Foreign Economic Administration added to specified agencies. Alaska and Hawaii now included in PDO 14's scope. Issued 2-26.

Office of Price Administration

INDUSTRIAL NAPHTHAS AND SOLVENTS —MPR 88, Am. 1—Industrial naphthas and solvents placed under MPR 510, (lube oils), since 510 uses March, 1942 base date instead of 88's August-October, 1941 base date. Residual fuel oil and blends with distillate fuel oil specifically mentioned as under 88's control. Kansas City area specific prices now included, after unintentional omission. Issued and effective 2-28.

ASPHALT PRICES—MPR 323, Am. 7—New reference points for liquid asphalt are Yazoo City, Miss. and St. Paul-Minneapolis, Minn., the latter point including asphalt cement prices. Los Angeles and Santa Maria, Calif. now have $11.40 prices for light saturants, definition of which is inserted, retroactive to 2-20-43. Ceiling set for packaging and resale of asphalt purchased in bulk. Resellers' mark-ups exceeding $2.50 per ton may be approved upon written application to OPA, if it is established that Aug. 1-Nov. 1, 1941 period enjoyed a higher mark-up. Issued 2-29, effective 3-6.

JURISDICTION OVER INDUSTRIAL NAPHTHAS SPECIFIED—MPR 510, Am. 1—Hawaiian delivery or shipping points may add 3.5c per gal. to industrial naphtha and solvent ceilings when sold in packages. Issued and effective 2-28.

OFFICIAL CORRECTION—Inadvertent insertion of naphthas in wrong section of 510 corrected. Issued 3-2, effective 3-8.

ELIGIBILITY FOR TIRE ALLOTMENTS—RO 1A, Am. 70—New tire allotment plan (Am. 69) restricted to wholesalers by removing from list dealers having 1941 net to other dealers of over $100,000. Issued and effective 3-1.

War Production Board

RATION ORDERS NOT ABROGATED BY LIMITATION ORDERS—L-79, Interp. 2—Compliance with L-79 does not remove necessity of compliance with RO 9A or any order of OPA or any other agency. Issued 2-29.

COMPRESSOR RESTRICTIONS — L-100, Revocation—Restrictions on heavy compressors are now governed by L-123 and M-293. Issued 2-28.

HEAT EXCHANGERS, PRESSURE VESSELS—L-123, as am. 2-26-44—Compressors, heat exchangers, and pressure vessels are among the 22 specified items of equipment listed in L-123 which may not be delivered without an AA-5 rating or better. Repair parts for these items and petroleum industry items covered by P-98-c are not covered by L-123. Issued 2-26.

CRITICAL HEAT EXCHANGERS—L-172, Revocation—Superseded by L-123 and M-293. See above, and M-293, below. Issued 2-28.

FORMS FOR Z PRODUCTS—M-293, Interp. 1—Revocation—Since Z products have been abolished, no forms necessary. Issued 3-1.

SCHEDULING PROCEDURE—M-293, Direction 1 as am. 2-28-44—WPB amendments of M-293 and its tables do not affect previous freezing of schedules or approval of individual transactions, unless the schedule or direction is amended under Pri. Reg. 18. Issued 2-28.

Direction 2—Tables 3-15 (except 7, revoked) apply to M-293 as amended 2-10-44. Z product classifications must now be disregarded and considered "undesignated". Old orders reported to WPB on form appropriate at time of filing need not be included on new form later specified by amendment to table. Issued 2-28, effective 3-1.

MRO SUPPLIES—CMP 5, as am. 2-26-44—Canadians obtain MRO supplies in U. S. under Canadian Order PO 5 B. When an order in the "E", "L", or "M" series assigns a specific preference rating to deliveries of particular material to be used by particular industry for specific purpose, such preference rating controls, and CMP 5 ratings do not apply. Provision made for application to WPB for increased quota, and for persons not listed in Schedules I or II to obtain controlled materials for MRO supplies. Issued 2-26.

LIMITATION ON INSTALLATION MATERIAL—CMP 9A, Direction 2—$25 is limit for material used by a repairman to install used cooking, plumbing, and heating equipment; $250 for material used by repairman purchased under CMP 9A to install new air-conditioning or refrigeration system authorized under both L-38 and L-41. Issued 2-26.

These digests of orders, amendments and interpretations are written with care and judgment for the purpose of giving the reader a reasonable idea of the character and extent of this material, but the publisher does not warrant their completeness or absolute technical or legal accuracy. Important decisions should be made only after due study of the complete text, which the Oil-LAW-Gram can furnish.

NPN will appreciate hearing from its readers if they feel any pertinent regulations have been omitted from this page.

Copies of the complete text of the following orders can be obtained from PLATT'S OIL-Law-GRAM, 1213 W. Third St., Cleveland, Ohio.

Minimum charge for single copies, $1, postage paid. One year's service, $100.

CODE: AO—Administrative Order; CMP—Controlled Materials Plan; D—Directive; FDO—Food Distribution Order; GMPR—General Maximum Price Regulation; GO—General Order; Interp.—Interpretation; L—Limitation Order; M—Conservation Order; MPR—Maximum Price Regulation; P—Preference Rating Order; PAO—Petroleum Administrative Order; Pri. Reg.—Priorities Regulation; Proc. Reg.—Procedural Regulation; PS—Price Schedule; RO—Ration Order; RPS—Revised Price Schedule; SO—Supplementary Order; SR—Supplementary Regulation.

PREFERENCE RATINGS—Pri. Reg. 3, as am. 2-26-44—Added to List A items, which may be delivered without regard to any WPB ratings, is manufactured combustible gas, of the type generally distributed by utilities. Blanket MRO ratings are prohibited in obtaining capping, closing and sealing machinery and equipment for cans, jars and bottles (except screw capping machines), having retail sales value of $25 or more, including the motor (see L-332). Issued 2-26.

FROZEN SCHEDULES — Pri. Reg. 18, as am. 2-24-44—Schedules are frozen, even though not filed with WPB, if approved or prescribed pursuant to any order listed in Appendix A. Producers, receivers of shipments, or claimant agency sponsors of a program may request amendment of frozen schedules as to one item or as to the whole schedule, by letter or on form for filing shipping schedules. All components of a product cease to be parts of a frozen schedule when the order covering the product is removed from the schedule. Cancellations and requests for hold-ups in an order both remove the order from a frozen schedule. Reinstatement, without substantial change in the order, may be requested within 10 days. Later reinstatement of a cancelled order constitutes placing of a new order, and is subject to scheduling according to conditions existing at time of reinstatement. Issued 2-24.

War Manpower Commission

CRITICAL LABOR MARKET AREAS — WMC Reclassification—Cities newly in Group 1 are; Region I—Biddeford-Sanford included with Portland, Maine; Region II—none; Region III—Somerville, N. J.; Region IV—Wilmington, N. C.; Region V—Lima, Ohio; Region VI—Chicago, Chicago Heights - Harvey, Moline, Rockford, Springfield-Decatur, Waukegan, Illinois; Regions VII, VIII, IX, X, XI—none. Region XII — Ventura-Oxnard, Calif. Issued 3-1.

REVISION OF LIST OF ESSENTIAL ACTIVITIES of WMC—List of specific activities under No. 17, "Production of Chemicals and Allied Products", greatly enlarged. Production of liquefied petroleum gas added to No. 23, "Production of Petroleum, Natural-Gas and Petroleum and Coal Products." Issued 2-25.

Arabian Pipeline Threatens to Embroil This Country In the "Frictions of the Market Place"

JUST as if he had the New Deal's pipeline and oil control scheme for Arabia in mind, former President Hoover wrote in *Colliers Weekly*, a month ago, about possible government participation in international cartels—

"Except for relief (food to starving people etc., Ed.), when governments engage in or direct the exchange of commodities then governments become the higglers in the market with other governments. **And all the frictions of the market place and all the emotions of competition are transferred to Foreign Offices and become frictions between nations.** It is the most dangerous road to war.

"Either government trading or cartels inevitably drive toward domination of domestic industry by the government. It means some sort of totalitarian economy. If a large part of the trade of other countries is to fall into these channels, we will need to set up many defense mechanisms if we are to preserve freedom in America."

Over in far-off Arabia, if this government builds the proposed pipeline and controls the sale of the oil passing through it as planned in Ickes' "contract of principles," then this government will be directly involved in "the frictions of the market place and the emotions of competition" in regard to the following, for illustration:

Dickering with the countries that own the oil (for in those lands the governments own the oil) over "royalty" payments which are so essential to the owning government's treasury or the private purse of the ruler for the development of the country or the happiness of that ruler. In the case of just one country where this proposed pipeline will originate, the royalty as at present agreed upon, said to amount to some $60,000 per day.

Taking oil from all the countries through which the line may pass in quantities and on royalty payments satisfactory to those countries' rulers.

Being Santa Claus to all other countries that may have, or that may think they have, oil deposits and who need royalty money.

Keeping peace with our "Good Neighbors" in Mexico, Central and South America who also have large oil deposits and can use more royalty money, while Ickesian pipeline feeds money to far-off lands.

Directing the sale of the oil, and probably at the "right price," in accordance with the financial desires of international diplomacy, all of which, it can quite properly be argued, is a responsibility of our government under the proposed "contract in principle."

Being a principal in an international oil cartel, instead of just an umpire, and having to deal directly with other members of the cartel as to price, territory and volume of sales.

Carrying on all this strictly commercial trading in regard to markets in which the entire American oil industry is directly interested and not just the three American companies who are now "contracting in principle."

There are many other serious questions that all Americans should ask regarding this pipeline deal before the New Deal is allowed to go ahead with it, but former President Hoover, in discussing this country's relations with possible foreign cartels, has named a very serious one.

Many a principal who is a good trader, prefers to stay out of the direct negotiations, leaving them to an associate who does not have final power to close, or to a third party, an intermediary. The dickering may be a little more extended thereby but the principals have better opportunity to study the progress of the negotiations without danger of committing themselves in an unguarded moment. And the principals also have full opportunity then to discuss the advancing stages of the dicker with all their associates.

Had President Wilson stayed in this country at the close of the last war, and dealt through emissaries, instead of taking part in the horse-trading directly himself and forgetting that the deal had to have formal approval of the U. S. Senate, the famous "peace treaty" of the last war could easily have been a document that the people of the United States, having been duly consulted, would have heartily approved. If there had been such a treaty so approved perhaps we would not be in the present war. But Wilson exposed himself to the hard dickering and personal combat that went on across the table and where at times it was hard to say "no." He was where it was fairly easy to pin him down on points that he should have consulted the American people about.

If this country is to own pipelines or other oil facilities in foreign lands, or even in this country, it will find the position of principal in a good, hard-boiled and fast-moving "horse trade" is entirely different from being an umpire, or an arbitrator.

What kind of trades can we expect impetuous, power-loving Harold Ickes to make, or any of the other New Dealers who believe in government in business?

Or his boss in the White House?

READERS' comments and opinions will be much appreciated by Warren C. Platt, NPN's Editor and Publisher, Penton Building, Cleveland 13, Ohio.

May the John Browns of Big Oil Make Their Next Report to 'Cross-roads' Stockholders

ONCE BUSINESS executives get down to New York and up in the tall buildings, they are quite likely not to see the things—even the human beings—that are immediately around them. In fact, they generally are fairly safely insulated from such contacts by the barricades they must, of necessity, erect if they are going to do any work at all. For everyone and his grandfather comes to New York to "visit around" and "find out what's doing." We wonder, sometimes, how these New York executives of our oil business get as much done as they do.

The consequence is, at least so it seems to the average "westerner" who lives out beyond the Hudson river, that New York executives think only in terms of millions but preferably in billions just like the New Dealers whom they generally do not like; they look at the country "as a whole" which means they know there are 48 states; they see the people as a "mass," duly "surveyed" as to opinions and preferences by a multitude of "experts" and they measure human beings, their likes and dislikes, even their souls, by "index numbers." We wonder if the experts even know how they arrive at them.

So when John A. Brown, president of Socony-Vacuum Oil Co., the other month focussed his public relations loud speaker on the state of New York and told the inhabitants thereof something of what his company meant to that particular state, out of the 35 or 40 in which he operates, he did a revolutionary thing.

The figures President Brown used are still large for average

consumption, being such as $21,300,000 of pay to 6728 people in the state; purchases of $18,000,000 for repair and maintenance items from manufacturers and others in the state; $2,900,000 of taxes, other than gasoline taxes; and $9,500,000 of the latter all within the state.

They still sound like Washington figures which are so large that they have numbed the average man's thinking.

What use President Brown made of this personalizing of his company to New York state, the official press agents do not say. He wrote a letter about it to the governor and presumably to other officials. But evidently he did not take the story to the cities and towns and counties with figures in hundreds of dollars instead of millions, and with names of those from whom he bought, and who are the neighbors of the readers of his statement.

Mr. Brown told New York state that 35,000 of the owners of the company out of a total of 116,000 live in the state. Some day and not too late, we hope, to save the industry as a free industry, President Brown will introduce those 35,000 New York state stockholders to their neighbors. They must have a lot of neighbors who belong to a lot of churches, and Chambers of Commerce and Rotary and Kiwanis and other clubs. Their kids must know a lot of other kids, all of whom, probably, are laboring more under the impression that "big business" is "bad business" and without knowing that some of the things they eat and wear come from their savings invested in this same "big oil business."

These same kids and maybe even their stock-owning parents, we'll bet, applaud when the reformers hurl bricks through the windows of the "bankers" and "big trusts" on "Wall Street" and "lower Broadway" because they never realize that they own the windows as well as the businesses behind them.

This is such a simple story that it is a shame the oil industry, and other big industries, have never told it. It's a story they should be proud of and should tell to every town and village where so many of the owners of America's "big businesses" live.

However, congratulations to John Brown for cutting up his vast business territory so that he talks to New York state about what the people of New York gain by the operations of the Socony-Vacuum Oil Co.

May the time soon come when John Brown and all the other top oil executives will dig out the stories of the ordinary human beings who have saved their dollars over the years and finally selected the Socony-Vacuum Oil Co. or some other big oil company, as having so much of their confidence that they will entrust these lifetime savings to their care.

Maybe the executives need to have more confidence in their stockholders who live at the small crossroads of your life and mine.

The Answer Should Come From the Industry

OPA APPEARS to be reorganizing its oil rationing division so that it will get the practical co-operation of the oil industry.

So far, Col. Bryan Houston, ex-oil man himself and new general ration chief for OPA, has named four good oil men to work in the oil rationing division. They are men from major as well as independent companies and all are thoroughly familiar with operating in gasoline or fuel oil, or both. Their identities and past connections are given in a news story elsewhere in this issue, which has been released by OPA.

As chief of all oil rationing, Col. Houston has named a non-oil man who has a good reputation as a business executive, a man allied in business with OPA Chief Bowles and who knows his way around Washington. He is A. R. Whitman.

The head of oil rationing or anything else, does not need to be an oil man. Sometimes it might help for him to be one and other times it might prevent an impartial view of conflicting oil industry opinions.

The trouble with OPA in the past has not been that the heads of its industry bureaus generally did not know anything about the businesses they rationed or fixed prices for, but that these heads did not know how to get facts from all sources in an industry, could not even recognize that there are conflicting interests in every industry and did not know how to organize committees so as to get a fair reflection of these conflicting views in the form of a practical final result. In short, the college professors and economists did not know their way around in this world but thought they were still sitting in comfortable chairs before classrooms of adolescent minds and that they, the professors, could continue to be the fountain heads of all wisdom and make the students like it.

What oil rationing, and oil price-fixing, needs, is the combined opinions and assistance of all in the industry and this, the new oil rationing chief will get if he is even half as good an executive and administrator as he is reported to be.

Oil men want to get these vexatious details of government co-operation settled quickly so they can get on with the war.

Now's the Time to End Trucking Handicaps!

THERE PROBABLY NEVER will be a better time than the present for all interested in truck transportation to eliminate the injustices and unnecessary hardships to interstate regulation of motor vehicles.

The damage that varying limits of weight, of tires and all the small rules governing trucks, inflict on the country as trucks move across state lines, become so large in retarding the war effort, that the public should be easily able to see them in their true light of unfair and costly restrictions. If the public can be made to see that handicap for war reasons, then the public can realize the cost it has been laboring under and will continue to labor under in peace times unless these regulations are changed.

There are so many things to do these days to make the war go better with fewer and fewer people to do them, that the point may well be raised if oil men are doing what they should to change these trucking rules.

The truckers, themselves, and truck manufacturers have been working through their own organizations but we can recall hardly a single oil association raising its hand the past year in support of any changes. Yet these oil associations are so strong politically that they could get much done in their state legislatures and through their governors if they would unite on a general campaign.

With the truck situation getting increasingly critical, the oil associations could well study what can be done. Trucks are not being made in the necessary number for civilian use and probably will not be for many months, perhaps a year or more. Parts and tires are hard to get and trucks are being laid up every day for lack of repairs.

Yet trucks are the most flexible and simplest means of supplementing, at low cost of steel and manpower, the railroads, barges and, so far as oil is concerned, the pipelines.

For ammunition to use in discussions with customers and legislators, oil men can well appeal to one manufacturer who has been carrying on a strictly truck and trailer greater-use campaign for many years. That manufacturer has published many booklets and folders with practical facts, just what every oil man needs in today's situation. These booklets are not advertising for the manufacturer but data for the cause of more efficient use of motor transport equipment. So, we are writing this editorial note so that every oil man can get good educational material for his own efforts by writing the Fruehauf Trailer Co., at Detroit, for the general industry material they have published in our mutual "cause."

LET'S ALL GIVE THIS MAN

a Great Big Hand

Traveling men are today probably operating under heavier handicaps than any other group. With gas rationing, crowded trains and busses (more frequently than not running on late schedules), and hotel accomodations virtually unobtainable in many centers, these "ambassadors of the brief case" deserve a world of credit for carrying on in the face of many obstacles. They neither ask for or receive any special favors, but plug away bringing to their customers about the only thing many have to sell today—service.

Of course, a great number of our products are necessary and vital to the successful pursuit of the war. Other lines have been discontinued entirely for the duration. Selling, as such, is virtually a thing of the past, but engineering and technical assistance, particularly in maintenance and installation work, is very important. We have retained our entire staff, which has been carefully built over the years, to bring those in the field the maximum knowledge and experience in measurement and control.

Some of our service engineers have been temporarily transferred to other jobs in our organization, such as, expediting, engineering and manufacturing, where special talents could be best utilized in producing war goods. They have willingly sacrificed their personal desires in the interests of their Country. When Victory is won, they will again be assigned to their territories to call on old friends whose contacts they sorely miss. These men are now having a hand in writing the future. They deserve a big hand from all who know or have worked with them.

PITTSBURGH EQUITABLE METER CO.

Atlanta **MERCO NORDSTROM VALVE CO.** Boston
Brooklyn Main Offices, PITTSBURGH, PA. Buffalo
Chicago Columbia Houston Kansas City
Los Angeles New York Pittsburgh
San Francisco Seattle Tulsa

National Meter Division, Brooklyn, N. Y.

There's A Pittsburgh-National Meter for Every Type of Service

Pittsburgh Rotocycle for Bulk Plants, Tank Trucks
Pittsburgh Rotocycle for Pipe Line Service
Empire Streamline Oscillating Piston for Bulk Plants
Empire Thermostatic Drum Filler for Filling Containers with Petroleum Products
Empire Oscillating Piston for Refinery and Industrial Services
Pittsburgh Reciprocating Piston for Service Station Pumps
Pittsburgh Disc for General Service

MANUFACTURERS OF THE MOST COMPLETE LINE OF PETROLEUM METERS IN THE WORLD

Asbestos-suited fire fighters bring a Western Maryland tank car fire under control

Railroads Keep Well Trained Crews on Alert To Combat Hazards of Tank Car Fires

By A. C. Holton,
NPN Staff Writer

CLEVELAND — American railroads, aside from doing a bangup job in the matter of handling greatly increased volumes of petroleum products, have found time to devise means and methods of protecting these vital cargoes against hazards of fire.

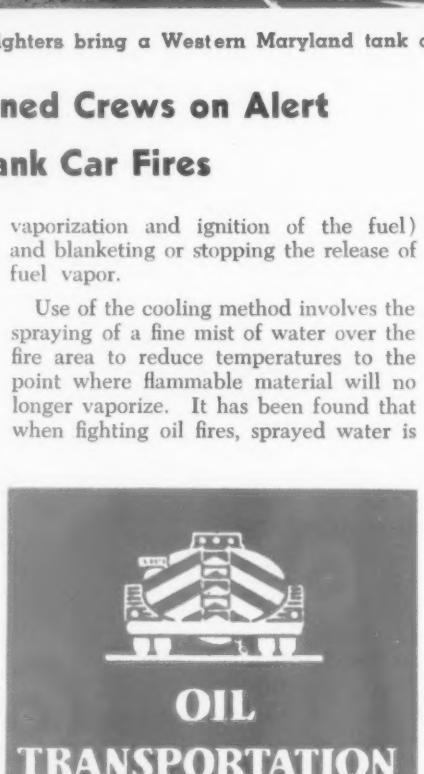
When America's entry into the war brought on tanker sinkings on the East Coast and other transportation bottlenecks developed, the railroads stepped into the breach and tank car hauls were stepped up enormously. The traffic has continued on a large scale despite the fact that construction of pipelines such as the Big Inch and Little Inch, now nearing completion, have afforded some measure of relief although this has been largely offset by the increased military demands.

It is still necessary, therefore, to move whole trainloads of highly volatile gasoline and other inflammable liquids over great distances and at relatively high speeds. So far, fortunately, tank car fires have been few. But the railroads, taking no chances, constantly are adding new equipment and continue to train special crews in the latest fire fighting methods. They are ready for any emergency.

Two Methods Popular

Two methods most commonly used by railroads to fight tank car fires, according to the magazines *Railway Mechanical Engineer*, and *Railway Age*, are cooling (eliminating the heat required for vaporization and ignition of the fuel) and blanketing or stopping the release of fuel vapor.

Use of the cooling method involves the spraying of a fine mist of water over the fire area to reduce temperatures to the point where flammable material will no longer vaporize. It has been found that when fighting oil fires, sprayed water is more effective than a steady stream because the stream of water has a tendency to spread the oil while the spray covers it with a cooling mist.



When an oil fire is "blanketed" an airfoam of water and chemicals is spread over it. In a second type of approach the delivery outlet is so designed that a suction is created on the liquid in the container. Air is drawn into the line and the mixture of air, water and liquid compound forms a foam at the tip of a special nozzle. This foam, floating on the surface of burning oil or adhering to burning surfaces, excludes oxygen.

Instructions Outlined

The procedure generally followed when the foam generator method is used is indicated by instructions issued to fire fighting crews on the Baltimore & Ohio Railroad. Following are the instructions:

1—Locomotive and tender with coupled fire-fighting car should be located up to 450 ft. from the fire.

2—Connect pump in car to steam supply from locomotive and to water supply from tender tank with a pipe.

3—Locate foam generator 50 to 125 ft. from the fire.

4—Connect foam generator to water supply from pump using 50 ft. of hose between generator and end of 2½ in. pipe from pump.

5—Connect opposite end of foam generator to 2½ in. hose to which is attached play nozzle.

6—Locate cans of foam powder conveniently near the generator.

7—Open water valve between tender tank and pump and place operator in position at play pipe nozzle.

8—Open steam valve between locomotive and pump and water will be forced through generator. (Steam pressure to pump not to exceed 150-lbs.)

9—As water flows through generator, operator should pour contents of 50 lb. container of foam powder into hopper of generator while operator at nozzle directs foam on fire.

10—Water pressure of not less than 50 lbs. is required for operation of the generator and the 3000 lbs. of foam powder will be sufficient for about one

Statement by
DICK GRIMSRUD
Superintendent of Equipment,
Petroleum Transport, Inc
Madison, Wisconsin

"During this war period, when we must operate day and night to move the greatest possible gallonage with our available equipment, we can't afford to have our units laid up. They must be on the road steadily, with little time lost for servicing and maintenance.

"That's what I like about our 12 Heil 'Trailerized' Units. They keep going. There's no trouble with leakers in our Heil 'Trailerized' fleet."

"There's no trouble with leakers in our Heil 'Trailerized' fleet"

. . . says this experienced operator, in praising the dependability of his Heil "Trailerized" (frameless) Tanks

Definite features of Heil engineering design and construction are responsible for this record of minimum leakage. The tank is formed of full-length longitudinal wrapper sheets, giving a strong, self-supporting shell like an airplane fuselage. This properly stressed "smooth-skin" structural design reduces the tendency for leaks. There are no internal or longitudinal supporting members. There is less footage of welded seams — further decreasing the chance of leakage.

If a leak does occur, repairs are far quicker and easier, because *all welds are accessible from the interior of the compartments* — no tedious removal of skirting, hose carriers, piping, etc. — no axle or spring interference.

Investigate this and other Heil features that add up to more gallonage per day, per month, per year. Write for bulletins today. Specify "Heil Trailerized Tank" on your Government application.

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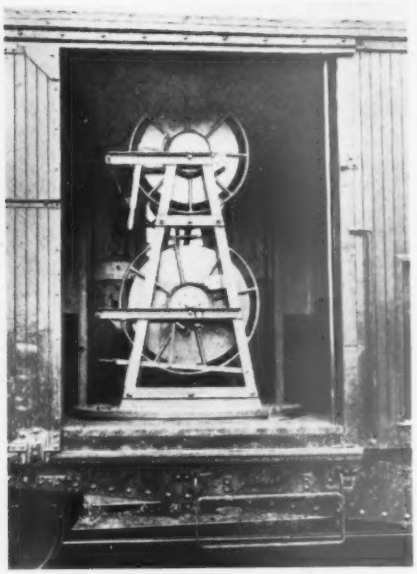
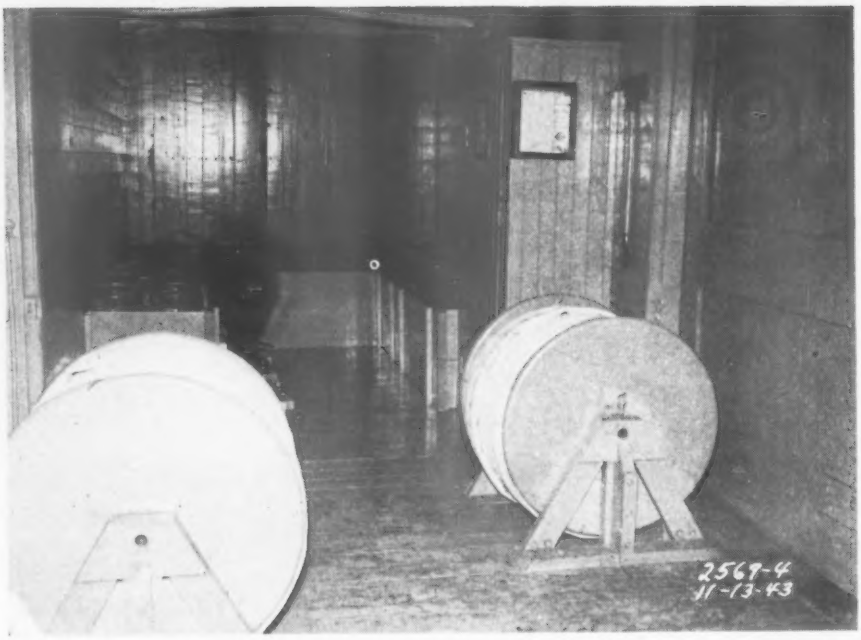


Hose reels on this New York Central car are on a turntable so that hose can be taken out at one end or at either side



The house car pictured is part of the Reading Company's emergency fire fighting equipment

hour's operation. Use nozzle with 1¾ in. tip for foam on oil fires.

The New York Central Railroad has an arrangement whereby, in very cold weather, the water in the fire car cistern is kept warm by steam connections when in the yard and by the locomotive when enroute—thus, interruption of water supply due to freezing is remote. This road uses a liquid compound known as Phomaide Solution for foam making. A supply of 8000 gal. of water is carried on their cars, an amount sufficient for more than 200 minutes with two nozzles in operation. The Lehigh Valley, Reading, Pennsylvania and Erie Railroads use the foam spray system in oil fire fighting.

Variation of System Used

Atlantic Coast Line uses a variation of this system. A proportioner is used at the pump to create the desired foam which is directed at the fire through a Phomaide playpipe. A by-pass arrangement between the pumps and generator permits the pumping unit to be used with water alone or with the water-chemical proportioner for creating foam.

Where the supply of water is limited, the airfoam method is particularly valuable. One gal. of liquid plus 19 gal. of water will produce 350 gal. of foam—increasing by 2½ times the effectiveness of the existent water supply when the spray method is used.

Regardless of the method, the source of water is a most important item. Sometimes a portion of the superstructure is removed from a box car and replaced with a tender tank. A variation of this arrangement is the use of a flat car on which a house structure for pumps, generator, tools and supplies and a tender tank are mounted.

Opinions vary as to the amount and kind of equipment necessary to stock a fire fighting unit. The Reading Railroad, which has a pair of fire fighting units, one assigned to Rutherford, Pa. and the other to Tamaqua, Pa., is equipped to fight any kind of fire. Each unit consists of a tender having a water capacity of 10,000 gal. and a steel underframe house car installed with the following equipment:

One Hale 500-gal. capacity fire pump; two reels of standard 2½-in. fire hose having 350-ft. of hose on each reel; three American-La France-Foamite generators; two firemen's asbestos suits; two ladders for exit to ground from car; two fire extinguishers; 5200 lbs. of foamite powder in 50 lb. cans; one standard fire axe; one spray nozzle; one 3-in. by 12-ft. extension pipe; five 5-gal. safety cans of gasoline for pump operation; one 5-gal. can of anti-freeze; one grease gun for lubrication; three lengths of 3½-in. tank hose used for suction when required; six extra rubber washers for 2½-in. hose; one broom; one shovel; one bucket; one drum of sand; one hydrometer; two spanner wrenches for fire hose; and one tank hose wrench.

ODT, Truckmen Plan Program

NPN News Bureau

CHICAGO—ODT district maintenance specialists from the seven-state Midwest region met with chairmen of industry truck maintenance committees last month and drew up a three-part program to conserve dwindling supplies of truck tires and repair parts.

Plan calls for (1) development of a plan for distribution of repair parts where they are most needed; (2) organization of educational campaigns among operators and employes; (3) learning something of the condition of trucks now in operation on which to base evidence of need for new trucks.

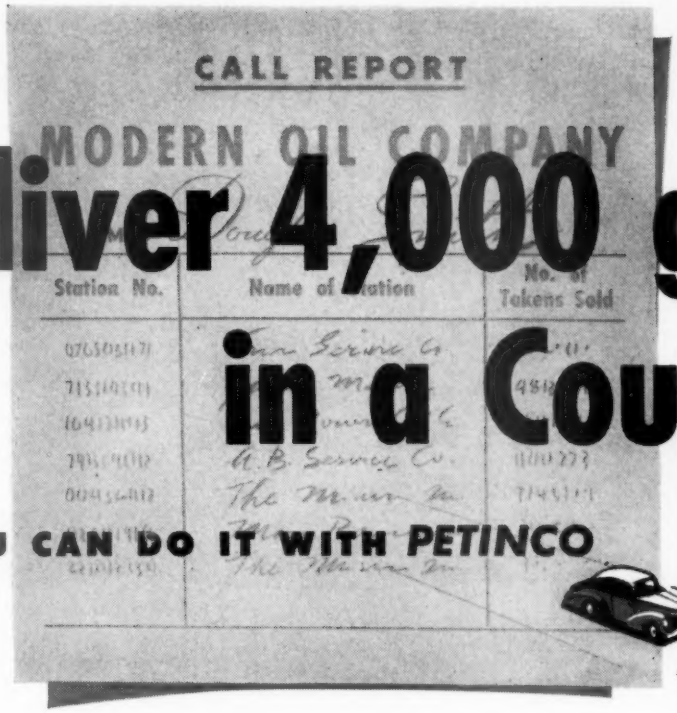
Eastward Rail Hauls Gain 7402 b/d

NPN News Bureau

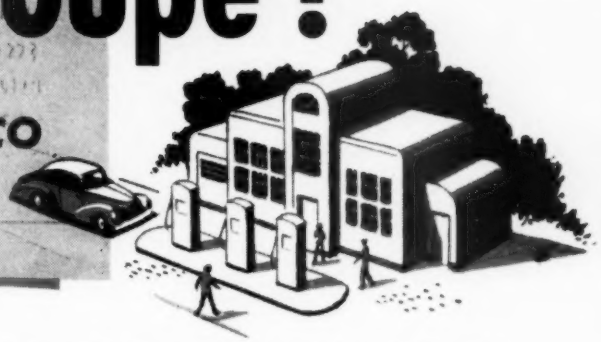
WASHINGTON—Tank car hauls of crude and products to the East Coast averaged 692,382 b/d during the week ended Feb. 26, compared with 684,980 b/d the previous week, PAW reported March 1. A total of 62 participating oil companies loaded 22,478 tank cars as follows:

Abercrombie	160	Globe	85	Shell	677
Aetna	12	Gulf	2,049	Shotmeyer	2
Allied	121	Hartol	142	Sinclair	1,009
American Minerals	221	Hess, Inc.	43	Skelly	7
Arkansas Fuel Oil	5	Home Oil	10	Socony-Vacuum	2,504
Ashland Refining	126	Jenney Mfg. Co.	63	Southland	6
Asiatic Petroleum	20	Libby	7	S.O. California	4
Atlantic Refining	1,407	Maritime Oil	56	S.O. Indiana	124
James B. Berry Sons	8	National Refining	34	S.O. Kentucky	45
Cantelou	9	Pacific	102	S.O. New Jersey	4,955
Canton	6	Pan American	1,081	S.O. Ohio	191
Chalmette	26	Petroleum Corp.	107	Sterling	1
Cities Service	634	Petroleum Heat & Power	21	Sun	2,357
Continental	300	Phillips	289	Talco	34
Crown Petroleum	22	Premier	2	Taylor Refining	33
Daugherty	54	Primrose	56	Texaco	1,726
Deblois	7	Pure	81	Tide Water	753
Deep Rock	37	Republic	123	Tiona	11
Drake	6	Richfield	152	Triangle	26
Elk Refining	31	Royal Petroleum	82	Waggoner	10
Freedom Oil	5			Western Oil	1

Deliver 4,000 gallons in a Coupe?



YOU CAN DO IT WITH PETINCO



Four thousand gallons in a coupe? Yes, in effect.

Here's how . . .

Instead of making the usual small dumps, fill the station tanks on one truck trip . . . simply put your gasoline in storage there, and save a lot of truck and tire mileage and manpower.

The station operator can't buy the tankful, of course. He can still pay for only a few hundred gallons at a time, as in the past. But, with PETINCO, he buys tokens from you . . . each token permitting him to draw 50 gallons of the gasoline stored in his tank.

And your wholesale man can easily and economically deliver 4,000 gallons *in tokens* in a couple of hours. Or the operator can go to your office for them, or even get them by mail or messenger.

PETINCO Inventory Control System has *proved* its benefits to the oil company, the dealer and the consumer. We'll gladly send details. Please write us. BOWSER, INC., Fort Wayne 5, Indiana.

PETINCO Saves You...

- Much of your delivery costs
- Investment in trucks
- Labor and time
- Bulk plant costs
- "Bad credit" losses
- Accounting costs
- Profits that might otherwise go to "bootleg" truckers.

This is the PETINCO unit, which can be installed on any electric meter pump. When a token, which can be individually designed for you is inserted, the mechanism permits the pumping of 50 gallons, as needed, from the tank. There are full safeguards for the oil company, the dealer and the consumer.

BOWSER ESTABLISHED 1885

BUY WAR BONDS

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REFINING NEWS *and* TECHNOLOGY

WPB Revokes Preference Ratings For New CS Facilities

NPN News Bureau

WASHINGTON — The War Production Board March 3 revoked preference ratings previously granted to four oil companies for construction of new facilities in connection with the manufacture of CS, a high quality blending component in production of aviation gasoline.

These actions will not change gasoline production schedules nor in any way affect the gasoline supply for civilians, WPB said. The oil companies affected are Socony-Vacuum Oil Co., Inc., Phillips Petroleum Co., Standard Oil Co. of Indiana, and Utah Oil Refining Co.

Dist. 2 Supply and Technical Panels Work Hard Keeping Midwest Plants Supplied With Crude

NPN News Bureau

CHICAGO — Crude oil shortages in Dist. 2 have become such a chronic problem that the crude oil supply panel of the refinery crude oil requirements temporary subcommittee is having its face lifted by shortening the name to Refinery Crude Oil Requirements and Operations subcommittee. That is, it has been taken off a temporary appointment basis and is being made a standing committee. So is the refinery crude oil requirements temporary technical panel, the two of which work together, although the technical panels have no regular meeting date.

The oil requirements subcommittee of eight men and three advisors is the Dist. 2 group of oil men with the heaviest worries about where to get enough crude to keep all refineries running to the best advantage in the Middle West.

They look forward to the day when the DSC compensatory plan has been expanded so that refiners will be reimbursed for extra transportation costs for bringing crude from Wyoming, Louisiana, Mississippi or anywhere in Texas or the Southwest it can be found. When that day of ample crude and ample transportation arrives, the subcommittee's work will be finished.

Meantime, the technical panel studies the operations of each refinery in Dist. 2 and determines the minimum amount of crude they need daily to turn out the maximum amount of aviation gasoline and other war products. This seemingly simple but highly technical data is turned over to the supply panel, which checks on the crude supply of each of the plants.

Under PAW orders, plants making products for civilian use are limited to 85% of normal runs, normal being the average runs for 18 months from July 1, 1941, to Dec. 31, 1942. Plants having more crude available than that are asked to divide with other plants having less than 70%.

This crude oil sharing is on a voluntary basis, but still has its complexities because of transportation difficulties. Obviously, an Oklahoma refinery with a crude overage would have trouble sharing it with a Michigan refinery when there is a lack of tank cars and no pipeline connection. The same applies to two refineries located within the state of Michigan, one on the west side and the other on the east side of the state. So a trade is worked out involving a third refiner with a terminal on the east border who has no surplus of crude, but who gives up crude there and gets it back a thousand miles to the south at another terminal, for example.

Shortages in the supply of crude first showed up in volume in 1942 and the problem of working out sales, trades and exchanges was handled by the Dist. 2 supply and distribution committee direct

Dist. 2 crude oil supply panel in session. Seated left to right: A. P. Ruether (Shell); R. G. Arner (Sinclair); G. W. Sanders (Pure); L. T. Weger, vice chairman (P.I.C. staff); Reid Brazell, chairman (Leonard); G. G. Woodruff (Globe); H. T. Ashton (Lubrite Division, Socony-Vacuum); S. H. Elliot, advisor (Sohio). Standing, left to right: Wallace Hemming (P.I.C. staff); John D. King, secretary, refining committee (P.I.C. staff); Donald Lincoln, visitor (Sun); C. W. Hurley, visitor, (Gulf). Absent when photo was taken were M. E. Foster, member (Phillips Petroleum Co.) Fred Wood, advisor (Standard of Indiana) and H. W. Camp, advisor (Cities Service)

Going Places !

The U. S. Navy built thousands of mammoth Landing Boats for invasions all over the world. This L. B. with its gaping doors, measures 375′ long, displaces 5,500 tons. Protected by rapid-fire guns. Shallow draft for beaching. Transports, jeeps, trucks, tanks, field pieces, bulldozers, supplies and food.

The top illustration is the artist's conception of the L. B. (beached) showing troops and war equipment disembarking. Other sketches show Gar Wood war equipment: Cargo and troop body, Gun Carriage, Dump Body, Bulldozer, Wrecker Crane, Refueling Tank and Patrol Boat.

Bonds Contributed to Building L. B's and other War Equipment shown. · Buy Bonds. · Hasten Surrender.

GAR WOOD INDUSTRIES, INC.

DETROIT 11 MICHIGAN

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until March 12, 1943, when the crude oil supply panel was appointed. Its first meeting took place March 29, and soon afterward the panel began to come up with a monthly "supplicant list" or in everyday doggerel, "crude oil beggar's list" of refiners who needed crude, the names of the companies from whom they received it, and how much. Before the schedule is effective, it must be approved by PAW, under whose authority the panel operates.

Each member of the panel was carefully selected before his appointment for his special experience or technical knowledge of refinery operations, pipelines, the qualities of crudes produced in different oil fields and which refinery as presently equipped is capable of manufacturing the desired products in maximum volume from the various crudes. Refiners with crude oil shortage problems present them at the subcommittee meetings if they are not able to work them out themselves.

All crude oil in the Big Inch pipeline will by-pass the Midwest this month, according to the supplicant list of Dist. 2 refiners, which totals only 46,600 b/d of crude to be shared or exchanged during the month. February total was 47,590 b/d and for January, 64,690 b/d. Following is the March list:

Supplying Company	Receiving Company	B/D
Aetna	Louisville	1,500
Allied	Sun	1,000
Cities Service	ElDorado	1,500
Deep Rock	Midland Co-op.	200
Farm Bureau Oil Co.	Louisville	1,000
Gulf	Arrow	1,265
Ohio Oil	National	2,300
Phillips Co.	Natl. Co-op.	1,700
Pure	Midwest	400
	National	1,500
	Old Dutch	200
	Rock Island	2,500
Roosevelt	Midwest	875
Shell	Globe	1,500
Sinclair	Sun	9,000
	Worth Refining	2,660
Sohio	Advance	1,750
	Cascade	250
	Louisville	500
	National	2,000
	Pana	300
	Stoll	1,000
Standard (Ind.)	Bay Pet.	500
	Derby	500
Texas	Derby	1,000
	ElDorado	1,500
	Johnson	1,200
	National	2,200
Skelly	ElDorado	500
Simrall	Lakeside	550
	Marvel	300
	Old Dutch	250
Leonard	Crystal	400
Carter	Kanotex	1,000
Sun	Crystal	300
	Pet. Specialties	1,200
Socony-Vacuum (White Star)	Marvel	300
	Total	46,600

Indiana Standard Buys Tract

NPN News Bureau

CHICAGO — Standard Oil Co. of Indiana has purchased a 260-acre tract adjoining its 800-acre refinery site at Whiting, Ind. The additional land will probably be used for expansion purposes later to relieve increasing congestion at the refinery.

Synthetic Rubber Gains Augur Bright Future, Say Experts at A.S.T.M. Symposium

NPN Staff Special

CINCINNATI—Developments reported at the Symposium on the Applications of Synthetic Rubbers held under the auspices of the American Society for Testing Materials March 2 in Cincinnati made it evident that, from the point of view of satisfactory utilization of synthetic rubber products, the manufacture and compounding of synthetic rubber is a permanent American enterprise.

Through changes in the design of the finished tire or other article, improvements in compounding the rubber, and the co-operation of industrial consumers in drawing closer specifications, remarkable results have already been achieved. In the improvement of the synthetic products these have come about in less than three years, and the results are said to be comparable with the improvements in natural rubber products which took place over 30 years or more.

The present developments, the technologists said, point the way to further product improvement in the near future. "Through the wonderful co-operation of rubber chemists and engineers, there can be expected marvelous advances in rubber technology that will make the synthetic rubbers do even more than natural rubber could do," Harry L. Fisher, of U.S. Industrial Chemicals, Inc., Stamford, Conn., one of the leading rubber technologists of the country, told the audience of several hundred attending the symposium.

Synthetic Rubber Tires

"The synthetic rubber passenger car tire is today a satisfactory product", stated P. M. Torrance, manager of the general laboratory of Firestone Tire & Rubber Co., in reporting on developments in synthetic tires and inner tubes. "At reasonable speeds it will deliver performance almost equal to the best prewar tire."

"The small civilian truck tires are reasonably satisfactory for use on light trucks, although their relative performance drops rapidly with extreme overloads. The great majority of Army truck tires fall in this size group and may be expected to give reasonable performance because, generally speaking, they are not overloaded. Tread cracking, which is a most serious problem in highway tires, is not serious in Army tires due to the non-directional cross bar design, which minimizes this type of failure and due to Army tires not being overloaded nearly as much as highway tires. The larger truck tires, 8.25 section and up, are still a most serious problem."

The use of high tenacity rayon fibers in place of cotton in making tires has been found to reduce the running temperature of the synthetic tires, making it equal or even lower than in natural rubber tires under the same conditions, said Mr. Torrance. Excess heat in synthetic tires, he said, caused premature fabric breaks and blowouts and also aggravated the other great weakness of synthetic rubber, namely, its lower tear resistance, which causes excess cracking or splitting when a cut or other injury breaks the tread surface.

"Sufficient high tenacity rayon has now been made available for large Army tires," said Mr. Torrance, for inter-city bus tires and for the larger sizes of truck tires that operate under severe conditions. There is further expansion in progress and rayon is now becoming available at such a rate that it is going hand in hand with the synthetic rubber conversion program, so that all large synthetic rubber truck tires can be made of rayon in order to give maximum service."

Overloading Must Go

Extreme overload and high speeds have been common in inter-city trucking and these must be eliminated if vehicles in this service are to operate on synthetic tires. "Just how this can best be accomplished without crippling the trucking industry is a problem now receiving a great deal of attention by the rubber industry and the government agencies concerned. In the meantime, we are doing everything possible to improve synthetic tires."

The use of GR-S (Buna-S) rubber for inner tubes, this authority stated, has been found reasonably satisfactory, except for the smaller sizes used on drop center rims, where the high well stretch causes many premature failures. There are indications that tubes for drop center rims may be improved through the use of other synthetic rubbers, particularly Butyl rubber, it was said. Largest size synthetic tubes have not been adequately tested for evaluation.

Discusses Processing Time

"Good progress has also been made in the use of GR-S in solid tires", said Mr. Torrance. "This is true not only of commercial solid tires but also of the bogie rollers and rubber tank tracks on military equipment which operate under the most severe conditions of any solid tire type product. The properties of this synthetic rubber appear to lend themselves better to replacing natural rubber in such solid tire applications. The Army has done extensive testing, and reasonable performance relative to natural rubber can be expected. Half-tracs have not yet been tested sufficiently for complete evaluation, but preliminary results indicate it is probable that a reasonably satisfactory product can be made."

Mr. Torrance referred to what has recently been termed the bottleneck in the synthetic rubber program, the longer time required for milling and processing the synthetic product. There are difficulties in the factory processing of syn-

Photo of Battleship North Carolina taken from accompanying vessel.

Official U. S Navy Photograph.

Proudly She Sails
ASSURED OF HER MIGHT

★
★

Confident in the efficiency of her offensive armament — there is equal assurance in her defense against attack, strengthened by recent developments in fire protection.

The performance of National Fire Foams in extinguishing serious fires is acknowledged in the following recent telegram:

> ***". . . Your Foam Fire-Fighting Apparatus is used extensively on naval vessels and has been instrumental in reducing losses due to oil and gasoline fires. You are to be congratulated on your record in producing this excellent fire-fighting equipment, which plays such a vital part in safeguarding our ships and the men who sail and fight on them.***
>
> ***C. L. Cochrane, Rear Admiral, U.S.N.***
> ***Chief of the Bureau of Ships"***

★
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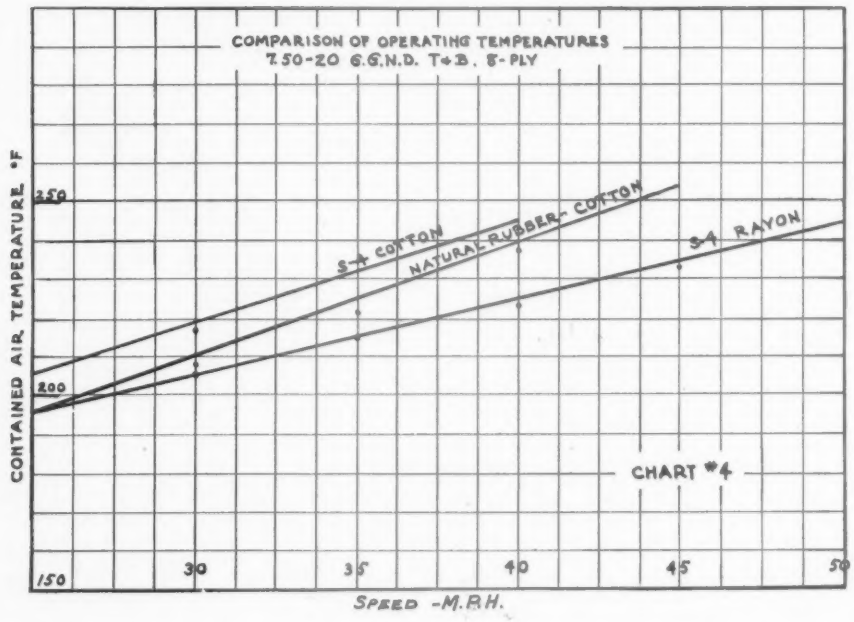
National Foam Fire Protection has been adopted by most large oil refineries and many other important industries.

NATIONAL FOAM SYSTEM, INC.

Specializing in Foam Fire Protection

1632 Sansom St., Philadelphia, Pa.



How rayon fiber reduces the running temperature of a synthetic rubber tire, making it equal to or lower than natural rubber. The operating temperature of a 7.50-20 90% synthetic rubber Army tire made with cotton is compared to that of the same tire made with rayon and also with a natural rubber tire made with cotton

thetic rubbers, he said, particularly the special purpose rubbers, such as Neoprene and Buna N. "Several years ago Buna-S required considerably increased milling times as compared to natural rubber and also processed more slowly in other operations," he stated. "This would have been a serious handicap because it would greatly reduce the capacities of our tire factories. Co-operative effort has produced softer GR-S and also improved methods of handling as well as improved compounds. At the present time, the overall drop in capacity is not over 20% and is probably somewhat less. Additional facilities are being provided by the War Production Board to compensate this loss so that our rubber factories will be able to process all of the rubber required."

Program Described

He described the programs for testing synthetic tires which have been conducted by various agencies to speed the development of the synthetic product. The largest tire testing operations in history have been carried on by the Army Ordnance Department at Camp Normoyle, Texas, and Camp Seely, Cal., he stated. In the Camp Normoyle test work more than 500 people are employed and more than 70 test vehicles are used. In December, 1942, it was said, a committee of chemists and engineers, known as the Synthetic Tire Construction Committee, was formed by the tire companies and the Office of Rubber Director to correlate all development work in synthetic rubber tires for both civilian and military uses. Since May, 1943, this group has operated a fleet of 26 large commercial trucks at Phoenix, Ariz., testing 9.00-20 tires from the 16 principal tire manufacturers.

"There is complete exchange of information and splendid co-operation so that rapid progress is being made in the development of civilian truck tires," said Mr. Torrance.

Other Products Improved

Equally noteworthy developments were reported to the symposium in the application of synthetic rubber to other products than tires and tubes. The postwar part of synthetic rubber in molded parts was discussed by Merle Sanger, of General Tire and Rubber Co. "The special purpose synthetic rubbers are already firmly established in such parts as seals, diaphragms, gaskets, boots, and countless other parts", he said. "The uses of these will definitely continue to expand. The permanent use of the general purpose synthetic rubbers will depend on how well these fit into the applications formerly filled by natural rubber, as well as on price comparisons. However, in some important uses, present experience would indicate that natural rubber will be substituted for the synthetic material when it is again available.

"In applications where exceptional age resistance and resistance to heat, weather or ozone, flame and oil are important, the synthetic rubbers will continue to be preferred. As time goes on the value of synthetic rubbers in many applications will become more apparent and so our customers may decide that the synthetic materials must remain to do many jobs formerly exclusively performed by natural rubber."

Discussing the use of synthetic rubber adhesives, Fred Wehmer, of the Minnesota Mining and Manufacturing Co., Detroit, said:

"The time we have had to work on the synthetic elastomers has been so limited that it seems obvious that we have only scratched the surface and that, if we are willing to make use of the properties which these materials have, a new vista of usages which were formerly impossible will be opened. This will not come to pass, however, unless there is close co-operation between those who are using the adhesives and those who are attempting to make them, since beyond a doubt we will have to modify our methods of using these materials in order to take advantage of the outstanding properties they possess."

The use of synthetic rubber latex for making sponge or cellular rubbers was discussed by Louis P. Gould, of Inland Manufacturing Division of General Motors Corp. "Possibly the day will come when we will have one or more types especially suited for the manufacture of cellular rubbers," he said. "Many difficulties in the cellular rubber field have been due to the variability in the plasticity and rate of cure of different lots of natural rubber and in the stability and rate of cure of different shipments of natural rubber latices. We hope these difficulties will be overcome in the man-made product."

$10,000,000 Credit Authorized For Refinery in Mexico

NPN News Bureau

WASHINGTON—Export-Import Bank last week announced authorization of a line of credit up to $10,000,000 to Petroleos Mexicanos for purchase in the U. S. of materials and supplies for 100-octane refining and other facilities.

Contract setting forth terms and conditions of the credit was signed March 2 by Mexican Ambassador Najera; Efrain Buenrostro, general manager of Petroleos Mexicanos; Antonio Carrillo Flores, director of Nacional Financiera; and Warren Lee Pierson, president of Export-Import. Advances by Export-Import will be evidenced by direct obligations of Nacional Financiera, which acts as fiscal agent for Mexican government, and repayment will be guaranteed unconditionally by Mexican government over period of from 5 to 6½ years.

Announcement confirmed that Petroleos Mexicanos has retained Phillips Petroleum Co. to furnish technical advice in connection with operation of 100-octane facilities. Arthur G. McKee & Co., of Cleveland, Ohio, will construct the plant, which reportedly will have 100-octane capacity of about 1000 b/d. Any U. S. Government department or agency has the right, under the loan agreement, to exercise option to purchase "certain quantities of high-octane gasoline and other petroleum products from time to time prior to Aug. 1, 1950."

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AN ACCEPTED business axiom is that "cumulative experience in interrelated fields creates an extra measure of proficiency in each of them." It applies with special emphasis to the Badger organization. . . . A long, rich and extremely broad experience is one of the reasons Badger is *always constructive* — confident—never held to hidebound rules or traditions — thoroughly capable of engineering new processes, designing new types of equipment, planning and erecting new kinds of plants in the fast-moving petroleum refining, petro-chemical and chemical worlds.

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Briefs from Week's News

Dallas Producer Acquires Rio Bravo Oil Holdings

Special to NPN

HOUSTON, Tex. — D. D. Feldman of Dallas has acquired all properties of the Rio Bravo Oil Co. of Houston, subsidiary of the Southern Pacific Railroad, for a consideration reported to be $1,500,000.

The deal includes 137,000 acres of land, 50,000 of which are in fee simple; all producing and nonproducing properties; all of the equipment and four drilling rights. The properties are in Texas at Humble, Pierce Junction, Electra, Luling and South Ward fields.

Under the terms of the deal, Feldman is obligated to drill 15 exploratory wells in two years.

Quartet From Houston Buys Santa Anita Territory

Special to NPN

HOUSTON, Tex. — The Santa Anita ranch, which includes about 7500 acres in northern Hidalgo County, Texas, has been purchased by four Houston business men engaged in oil.

The property was purchased from Burton Dunn, of Corpus Christi, for approximately $100,000.

Half the property has been apportioned to W. L. Golston, while one-quarter goes to W. J. Golston. J. B. Greathouse and W. D. Dunman each receive one-eigth.

The land has been leased to Baldridge & King Oil Co. and Standard Oil Co. of Ohio, with the owners retaining oil royalties.

Crude Stocks Continue Descent

NPN News Bureau

WASHINGTON — Stocks of domestic and foreign crude totaled 237,137,000 bbl. on Feb. 26 compared with 237,511,000 bbl. the previous week, the Bureau of Mines reported March 3.

Largest drops were California, down 360,000 bbl., Mississippi, down 226,000 bbl., Louisiana, down 182,000 bbl.; and Illinois-Indiana, down 80,000 bbl. Only sizable increases were Texas, up 260,000 bbl.; Kansas, up 259,000 bbl.; and foreign, up 140,000 bbl. Other area changes were slight.

Flood of Foreign Oil Feared by Col. Thompson; Cites Texas Cut as Trend Toward Excess

Special to NPN

AUSTIN—The United States oil industry in the not too distant future may find itself confronted with a flood of foreign oil that will transform the picture from "too little" to "too much", Col. Ernest O. Thompson, Texas Railroad Commissioner and oil authority, has intimated.

Col. Thompson drew attention to the forced cut in Texas production for March as already showing a trend of excess oil to meet the demand, and hinted that "reverse lease-lend" is capable of greatly aggravating that situation.

"This new pipeline across Arabia will carry a lot of oil," he remarked. Col. Thompson believes the influx of South American oil into the United States is responsible for the glutted conditions of Texas storage, and at a recent hearing remarked that an East Texas field producing a heavy crude had to be cut, while the same type of oil is being imported.

Motorist Doesn't Care

"Reverse lease-lend" on oil would not hurt the big companies, since they would be "hauling their own oil back for their own use," Col. Thompson said, "but it will be hard on the little fellow." The average American motorist, he thinks, does'nt give a hoot where the crude that makes his gasoline comes from, just so there is plenty of it.

He declined to venture on whether importations of oil would mean any change in gasoline rationing during the war, but did say positively that "there won't be any gasoline rationing after the war."

The Texas Commission, in an amended March order, cut the state's production 53,000 barrels daily, after the PAW had re-figured its demand estimate. This will bring Texas production down to 1,965,000 barrels daily, the first time the figure has dropped below two million in many months.

Pipeline Proration Ordered

PAW revised its estimate downward at the urging of the Texas Commission, which pointed out that pipeline proration is already being instituted in several Texas fields, including those producing high-octane crude, because the demand is not enough to take the allowable.

Col. Thompson told NPN that Texas oil in storage is now at the highest point in its history, which, he said, "should stop a good bit of this talk about an oil shortage."

Col. Thompson pointed to the situation developing about the new Stanolind pipeline from the Slaughter Field in West Texas to Drumright, Okla., as strengthening his argument that there is too much, not too little, oil, even as the war effort nears its highest pitch.

It now appears, he told NPN, that there will not be enough Dist. 2 refiners interested in buying West Texas oil to keep the pipeline going at anywhere near its capacity. He offered no reason as to why the refiners had cooled toward the West Texas crude. He said he presumed that the other line being built by Magnolia from Midland to Corsicana, where it will tie into other pipeline outlets, will have a capacity demand.

Cut Production Days

In order to reduce the Texas March output 53,000 barrels, the Commission reduced the number of production days on a number of fields where operators had testified in the statewide proration meeting that their allowables exceeded their market demands.

The following production days were ordered: Yates and Panhandle fields, 26; Ownby, 25; KMA-Ellensberger, 23; Foster, 21; West Ranch and Van, 19; Fuhrman, Means and Walker, 17; Emma, Sand Hills Permian, and Johnson, 15; North Cowden, South Cowden, and Mascho, 12; Abell and Cedar Lake, 11.

The March order for other fields was left unchanged.

Puts 1944 Texas Oil Output At Three-Quarter Billion

Special to NPN

HOUSTON, TEX.—Oil production for Texas for 1944 was estimated by Maston Nixon, president of Texas Mid-Continent Oil and Gas Association, at 750,000,000 bbls. from the state's 100,600 wells. He reviewed the life of the Texas oil fields from the time of the association's organization up to the present. The silver anniversary meeting of the association will be held in Houston, Oct. 12-13.

He compared the three-quarter billion figure to production in Texas during 1919, the association's first year, when Texas was producing oil at the rate of about 106,000 b/d from 7134 wells. Production in 1918 was 38,750,031 bbls. with a value of $1.932 a bbl., or a total of $74,867,537. In 1943 Texas produced 593,000,000 bbls. of oil from 100,606 wells which brought an average of $1.18 a bbl., or a total of $700,000,000, according to his calculations.

Texas natural gasoline production in 1944, he said, is expected to reach two and one quarter trillion feet as compared to 13,400,000,000 cubic ft. produced in 1918 and 2,070,171,000,000 cubic feet in 1943.

"In the period between the two world-wide conflicts, the petroleum industry, operating under the American system of free enterprise, reached such a state of efficiency and capacity that it was prepared to go to war with the least loss of time," he asserted.

PAW estimates current military requirements at 1,210,000 b/d and civilian needs at 3,215,000 b/d, totaling 4,425,000 b/d, the association said.

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WHEN IT'S AN EXIDE YOU START

Postwar Prospects—

New Peaks in Fuel Consumption and Auto Output Forecast by 1950

C. L. Burrill, Analyzing Industry Surveys, Finds 'Gas' Demand Should Rise 29% to Handle New Registrations by End of Decade; Bases Study on First Full Year of Peace Starting in 1946

NPN News Bureau

NEW YORK—New peacetime highs in automobile output and petroleum consumption are forecast by 1950 in several industry surveys just completed. These surveys are predicated on the end of the war in Europe this year, and in the Far East by 1945, and at least four years of peace in the current decade. During these four years—from 1946 to 1950—the sharp rise in car production and petroleum consumption is seen in the context of a general industrial and business recovery lifting to levels higher than those of the immediate pre-war years.

Confirming evidence for the soundness of the estimates is seen in the fact that the figures offered by different industry research groups, with valiant approaches to the problem, all agree closely. The most valuable of these figures are those which have been assembled by the Automobile Manufacturers Assn., the Automotive Council for War Production, and the Rubber Manufacturers Assn. in connection with sessions of the recently dissolved Subcommittee on Postwar Readjustment of the Petroleum Industry War Council. Although the exchange of data by these groups has been confidential, the general findings have come to light, and have in turn served for the most complete estimate yet made of postwar petroleum consumption, that prepared by C. L. Burrill, petroleum economist of the Standard Oil Co. (N.J.) and presented at the recent meeting of the American Institute of Mining and Metallurgical Engineers here. (*See NPN, March* 1, *p.* 4) Before reviewing Mr. Burrill's own figures, a few of the estimates on future peacetime automobile production will be presented as the basis for the computation of postwar petroleum demand.

Postwar Automobile Production

All estimates of automobile output, of course, rest on what assumptions are made as to the time of the ending of the war. The working assumptions that form the basis of the figures offered here are (1) that the war in Europe will be over by the end of 1944; (2) that the war in the Far East will be over by the end of 1945. Even after the end of both phases of the war, there is still the question as to how long government controls will continue, both as to price and materials. And the ability of the automobile industry to resume normal peacetime operations depends on what type of termination settlements are made of existing war contracts.

With most favorable government action and adequate pre-surveys by the auto industry, passenger car production could be resumed within three to four months, but best judgment is that full production would be delayed until perhaps seven months after the end of the war. Certain experts of the Automobile Manufacturers Assn. believe that postwar automobile capacity cannot increase by more than 50% over the 1941 prewar peak. This would limit production to not many more than 6,000,000 cars. These statisticians put the number of usable passenger cars at the end of 1945 at 21,000,000, and say that on the basis of 3,500,000 cars produced in the first full year after the war and 5,500,000 thereafter, it will require three years to reach the prewar peak production, assuming normal scrappage. Table I is Mr. Burrill's revised estimates of postwar output.

As for trucks and busses, the estimates are somewhat different since production facilities and supply sources have not been so seriously affected by military needs. An expanded truck production program is mapped, despite the fact that many Army trucks at the close of the war likely will be available for return to civilian use. Automobile industry experts have forecast that postwar truck production will equal the prewar peak of 900,000 units. One petroleum industry compilation on postwar truck output is shown in Table II.

Estimated Consumption of Petroleum Products in the United States After the War

Current authority for the conversion of postwar automobile production figures into petroleum consumption is Mr. Burrill. The following statistics are taken from his estimates made before the A.I.M.M.E. session, Feb. 24. Mr. Burrill stresses that his forecasts both of automobile output and petroleum demand are determined by his assumption that the final phase of the war will be over by the end of 1945 and that the Fed-

TABLE I—Estimate of Passenger Cars in Use 1941-1950

	In Use Jan. 1	New Registrations	Total Registrations	Scrapped	In Use Dec. 31	Average In Use
1941	25,910,492	3,731,166	29,641,658	1,972,601	27,669,057	26,789,775
1942	27,669,057	400,000	28,069,057	*3,000,057	25,069,000	26,369,000
1943	25,069,000	300,000	25,369,000	**1,700,000	23,669,000	24,369,000
1944	23,669,000	†1,000,000	24,669,000	1,500,000	23,169,000	23,419,000
1945	23,169,000	{†1,700,000 / 1,000,000}	25,869,000	1,800,000	24,069,000	23,619,000
1946	24,069,000	4,000,000	28,069,000	2,000,000	26,069,000	25,069,000
1947	26,069,000	6,000,000	32,069,000	3,000,000	29,069,000	27,569,000
1948	29,069,000	5,000,000	34,069,000	3,500,000	30,569,000	29,819,000
1949	30,569,000	4,000,000	34,569,000	3,000,000	31,569,000	31,069,000
1950	31,569,000	3,000,000	34,569,000	2,500,000	32,069,000	31,819,000

*Estimated 2,000,000 laid up and 1,000,000 scrapped.
†Brought out of dead storage.
**Estimated 700,000 laid up and 1,000,000 scrapped.

TABLE II—Estimate of Trucks in Use 1941-1949

	New Trucks Registered*	Trucks Scrapped†	Net Addition	Cars Carried Over From Previous Year	Cars Carried Over Into Next Year	Registrations at End of Year	Trucks in Use
1941	641,000	566,000	75,000	4,751,000	4,826,000	5,127,000	4,727,000
1942	138,000	510,000	372,000	4,826,000	4,454,000	4,887,000	4,647,000
1943 (est)	190,000	236,000	46,000	4,454,000	4,408,000	4,719,000	4,549,000
1944	142,000	211,000	69,000	4,408,000	4,339,000	‡4,620,000	4,454,000
1945	250,000	284,000	34,000	4,339,000	4,305,000	4,586,000	4,446,000
1946	792,000	378,000	414,000	4,305,000	4,719,000	5,000,000	4,630,000
1947	792,000	378,000	414,000	4,719,000	5,133,000	5,414,000	5,030,000
1948	792,000	378,000	414,000	5,133,000	5,547,000	5,828,000	5,430,000
1949	608,000	378,000	230,000	5,547,000	5,777,000	6,058,000	5,741,000

*Includes 1,000,000 vehicles laid up in 1942.
†Includes 600,000 vehicles laid up in 1942.
‡Includes 250,000 vehicles laid up in 1942.

TABLE III—Estimate of Busses in Use 1941-1949

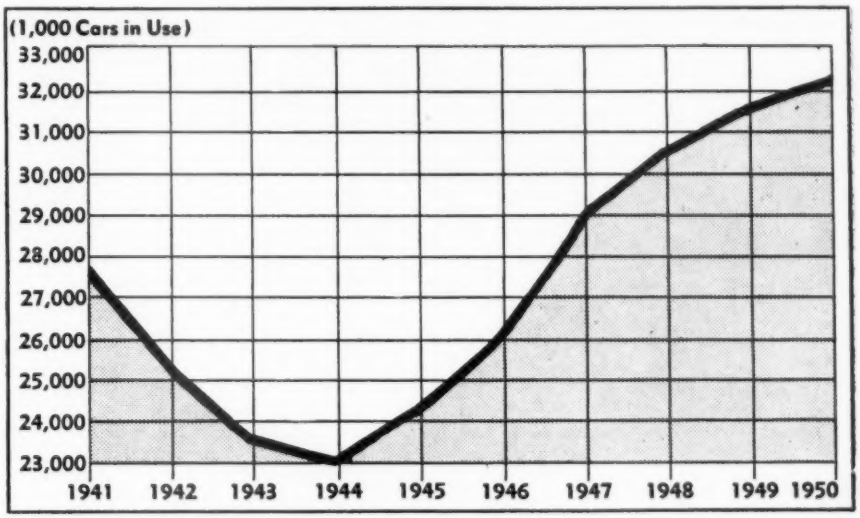
	New Busses Registered	Busses Scrapped	Net Addition	Cars Carried Over From Previous Year	Cars Carried Over Into Next Year	Registration at End of Year	Cars in Use
1941	17,000	19,000	—2,000	137,000	135,000	143,000	132,000
1942	16,000	17,000	—1,000	135,000	134,000	147,000	143,000
1943	10,000	6,000	4,000	134,000	138,000	147,000	142,000
1944	8,000	8,000	....	138,000	138,000	147,000	142,000
1945	13,000	11,000	2,000	138,000	140,000	146,000	142,000
1946	20,000	12,000	8,000	140,000	148,000	155,000	145,000
1947	20,000	11,000	9,000	148,000	157,000	164,000	154,000
1948	20,000	14,000	6,000	157,000	163,000	170,000	161,000
1949	20,000	17,000	3,000	163,000	166,000	174,000	166,000

eral Reserve Board Index of industrial production (in peacetime the most useful index of business activity for purposes of predicting petroleum consumption) will drop from the current level of 245 (on basis of 1935-1939 = 100) to an average of 140 during the first full year after the war; then will rise to an annual peak of 175 near 1950.

Other assumptions made by Mr. Burrill in computations are that restrictions on use of petroleum products will be partially removed in 1945 and entirely removed by the end of that year; government control over prices and qualities of petroleum products and tanker rates will be removed by the end of 1945; consumption of gasoline by passenger cars will not be seriously limited by the availability or quality of tires after Jan. 1, 1945; and consumption by trucks and busses will not be so limited after July 1, 1946.

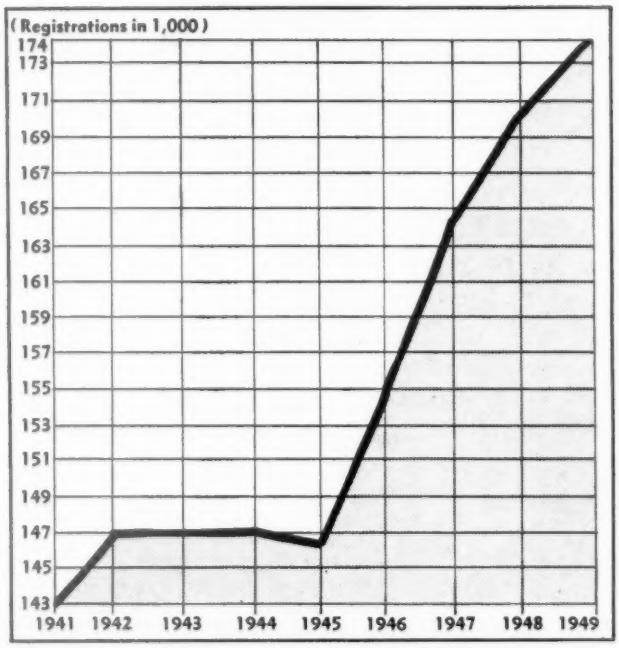
Gasoline production in the U.S. now is less than the monthly peak production in December, 1941, yet 30% to 40%

Estimate of Passenger Cars in Use 1941-1950



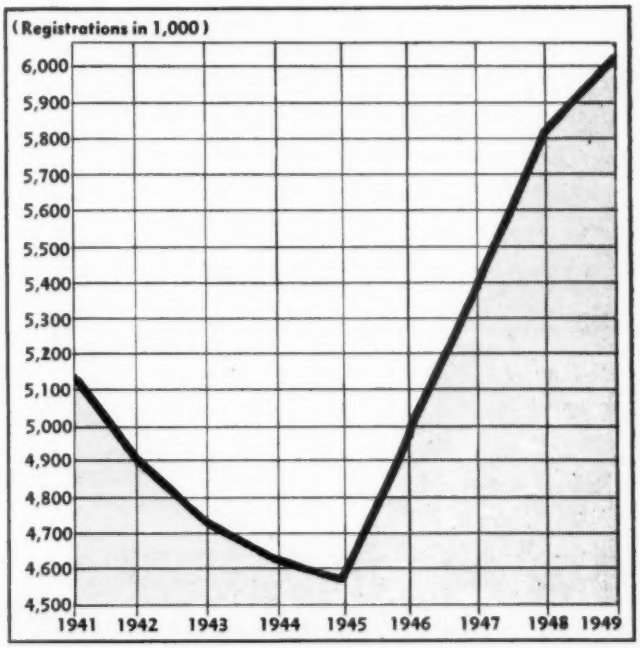
For details see Table I

Estimate of Busses in Use 1941-1949



For details see Table III

Estimate of Trucks in Use 1941-1949



For details see Table II

"Duck Shooting" in Italy

Out of the invasion of Sicily and Italy have come many striking examples of the value and versatility of GMC Truck & Coach Division's 2½ ton Amphibian Truck. General Montgomery and his staff are reported to have ridden into Sicily in a "Duck." Both the British Eighth Army and American Fifth Army used them by the hundreds to establish beachheads and supply their forces on the Italian mainland. A hundred Axis soldiers are said to have surrendered without a struggle when one of these monsters emerged from the surf with machine gun blazing. As the illustration above shows, the "Duck" is now equipped to do some shooting on its own behalf. Armed with a swivel-mounted, 50-caliber machine gun, it can help fight attacks from any direction. Watch the news stories from the many fighting fronts and you'll notice that the "Duck" is out in front in most amphibious operations.

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GMC TRUCK & COACH DIVISION
GENERAL MOTORS

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Volume Producer of GMC Army Trucks and Amphibian "Ducks"

of the total is being used by the military. For an estimate of gasoline consumption by passenger cars, two estimates are taken: (1) the number of cars in use; (2) the average consumption per car.

Year	Consumption Per Car Per Year Barrels 42's
1941	16.6
1942	12.5
1943	9.9
1944	10.5
1945	13.5
1946	16.0
1947	18.5
1948	18.5
1949	18.0
1950	18.0

The estimates of consumption per car used in calculating the total consumption by passengers cars are as follows:

TABLE IV

(Gasoline Consumption (bbls. 42's))

Year	Per car	Total	Percentage increase of 1941 base year
1941	16.6	445,000,000	...
1942	12.5	330,000,000	—25
1943	9.9	242,000,000	—45
1944	10.5	246,000,000	—44
1945	13.5	319,000,000	—28
1946	16	402,000,000	—10
1947	18.5	510,000,000	+12
1948	18.5	552,000,000	+24
1949	18	559,000,000	+25
1950	18	572,000,000	+29

The totals in Table IV are derived from multiplying cars in use in Table I by consumption per car. In comment on the figures, Mr. Burrill says:

"The low estimates during the war period reflect the effect of rationing. In 1945, after completion of the war in Europe, consumption per car was increased considerably on the assumption that rationing would be relaxed, but not eliminated. Beginning in 1946, the estimates reflect only physical or economic factors which would influence consumption, and contemplate no rationing.

"Consumption per passenger car in the postwar period will be affected by a number of factors. Those tending to increase the consumption per car are:

"1. Gasoline will be plentiful, whereas in the immediate postwar period the supply of some commodities (such as automobiles, radios and refrigerators), which normally compete for a share of consumers' dollars, will be inadequate. Until reconversion is complete, therefore, gasoline may obtain a greater than normal share of consumers' expenditures.

"2. Consumers will have large savings and may spend more of current income.

"3. Cars will be older and, to the extent they are run, will probably consume somewhat more gasoline per mile of travel. As new cars appear in large numbers the effect of this factor will disappear.

"4. There may be a large amount of automotive travel by families returning to their homes from war production centers.

"5. Construction of super highways, as public works projects designed to reduce unemployment, may tend to increase consumption per car.

"6. When restrictions are lifted people

may, for a short period, drive more than they otherwise would, just to be driving.

"Factors which will tend to reduce the consumption per passenger car are as follows:

"1. In the immediate postwar period the annual mileage (and therefore the consumption per car) may be restricted because passenger cars will be in poor repair and mechanics may not be available to make the necessary repairs even though (as the writer expects) repair parts are available in adequate quantities. After the first postwar year there should be no problem on this score.

"2. The generally unsettled conditions during the period of reconversion, while war workers are shifting to civilian industries and soldiers are still being demobilized, may create a cautious attitude in the minds of many people, thereby tending to restrict vacation travel which is essential to a high consumption per passenger car.

"3. In later years of the period under review (1949 and 1950) the effect of new passenger cars designed to give greater economy may tend to reduce the average consumption per car."

From Table V, the largest increase in any year over the previous year is estimated for 1947 when large increases in both numbers of cars and consumption per car give an increase of 108,000,000 bbls., or 27%.

Exports of automotive grade gasoline are expected to show a steady decline as other areas become more economical sources of supply.

Truck and bus consumption estimates are based on published studies of the Bureau of Public Roads and reflect the predicted high level of business activity "and the continued expansion of truck and bus transportation on the one hand, and the growth in the use of Diesel engines on the other." Estimates of farm consumption take into consideration the fact that farmers have reduced their debts, have not resorted widely to speculation and have pushed farm savings to the highest point in history.

Mr. Burrill says "The estimates of total demand for all gasolines indicate a figure of 649,500,000 bbls. in 1946, only 6.5% less than the prewar peak demand of 1941. A sharp increase, almost entirely attributable to passenger car consumption, is indicated for 1947, and by 1950 total demand is estimated at 862,500,000 bbls., 24% greater than in 1941."

These figures are set forth in Table V.

Tables VI to XI show estimated demands for other petroleum products. Some comment is made by Mr. Burrill on each of the items.

Residual Fuel Oil—Postwar estimates include Navy requirements and reconversions from coal to oil. Estimates in Table VI indicate expected consumption by the Navy, for heating purposes and for all other purposes. No taxes or

SOUTHEASTERN OIL

Thank God *for Good Friends!*

THOSE WHO, IN THE PAST, made possible the basis for our present ability to do our share in the war effort—

THOSE WHO NOW are able to understand that we must fulfill our primary responsibility of transporting and supplying petroleum products for the Army and Navy even though they may thereby be forced to tighten their own supply belts—

THOSE WHO, AFTER VICTORY, will rely on us to provide a complete line of branded and unbranded petroleum products at strategic distribution points along the South Atlantic Coast.

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TABLE V—Estimated U. S. Gasoline Demand

(1000 Barrels of 42 Gallons Each)

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Domestic Demand										
Passenger Cars	445,321	329,992	242,400	246,000	319,000	402,000	510,000	552,000	559,000	572,000
Trucks and Busses	149,000	.....	.....	.....	.....	140,000	150,000	160,000	170,000	180,000
Agriculture	25,000	.....	.....	.....	.....	30,000	30,000	30,000	30,000	30,000
Aviation	12,756	.....	.....	.....	.....	17,000	17,000	20,000	25,000	30,000
Misc. and Losses	38,500	.....	.....	.....	.....	31,000	32,000	32,000	36,000	38,000
Total	670,577	.....	.....	.....	.....	620,000	739,000	794,000	820,000	850,000
Exports—Automotive										
North America	. . .	. . .	. . .	. . .	. . .	2,000	3,000	4,000	5,000	5,000
Europe	. . .	. . .	. . .	. . .	. . .	5,000	3,000	2,000	1,000	.....
Asia	. . .	. . .	. . .	. . .	. . .	6,000	4,000	2,000	1,000	.....
Oceania	. . .	. . .	. . .	. . .	. . .	4,000	3,000	2,500	2,000	1,500
Total	. . .	. . .	. . .	. . .	. . .	17,000	13,000	10,500	9,000	6,500
Exports—Aviation										
North America	. . .	. . .	. . .	. . .	. . .	500	1,000	1,000	1,500	1,500
Europe	. . .	. . .	. . .	. . .	. . .	1,000	2,000	3,000	3,000	3,000
Asia	. . .	. . .	. . .	. . .	. . .	5,000	2,000	1,000	.....	.....
Oceania	. . .	. . .	. . .	. . .	. . .	6,000	2,000	1,000	1,500	1,500
Total	. . .	. . .	. . .	. . .	. . .	12,500	7,000	6,000	6,000	6,000
Total Exports	24,076	.....	.....	. . .	.....	29,500	20,000	16,500	15,000	12,500
Total Demand	694,653	624,092	617,700	700,000	675,000	649,500	759,000	810,500	835,000	862,500

additional import duties are expected. Consumption for heating purposes has been increased moderately over prewar levels in line with past trends. Domestic demand in 1948 is shown as slightly greater than 1941 consumption. By 1950 domestic demand of 413,000,000 bbls. is indicated, or 7.4% above 1941. Total demand estimates in 1950 are about 5% greater than in 1941.

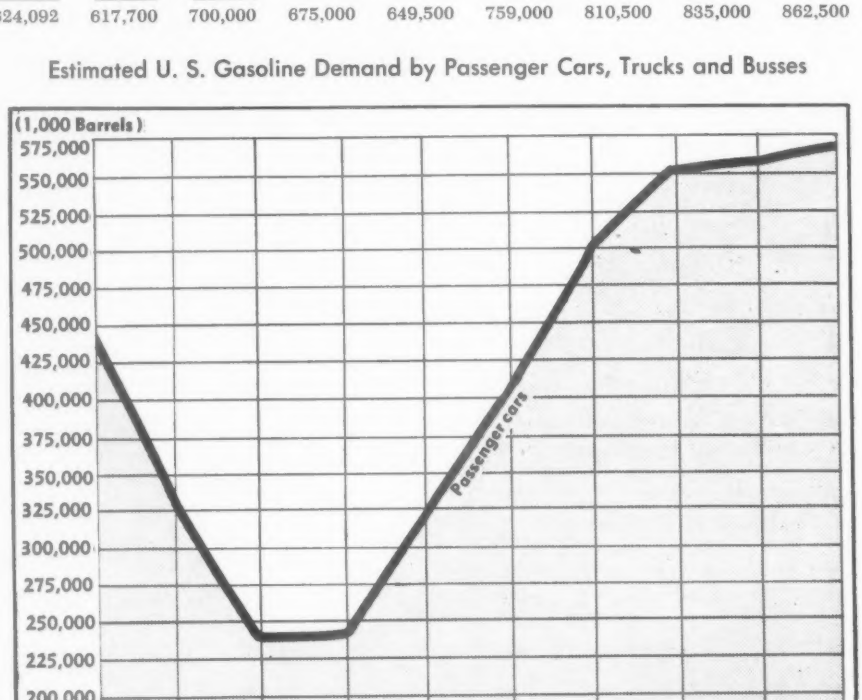
Distillate Fuel Oil—Outlook for distillate fuel oil depends largely on the outlook for oil burner installations. This in turn depends on residential building which is expected to reach a new high rate of perhaps 1,000,000 units a year. Decreased consumption per burner after 1948 is predicated on greater efficiency of burners. Table VIII indicates that heating oil demand will reach 179,000,000 bbls. in 1950 compared with 121,000,000 bbls. in 1941, an increase of 48%. Diesel oil consumption estimates reflect abnormal war expansion and peacetime contraction, plus added use of this fuel by trucks and railroads after the war. Estimates for 1946 are 21% greater than 1941 consumption, and estimates for 1950 are 55% greater.

Kerosine—Prewar demand for kerosine was largely for space heaters. Perhaps half of it was used for cooking, illumination, tractor fuel. While use of kerosine for heating purposes is expected to continue, its use for other purposes is expected to decline with the shift to electricity or gas. The 1950 estimated demand is 14% over 1941 consumption.

Lubricating oils—The estimates are based on the ratio of lubricating oil consumption to automotive and aviation gasoline consumption, and for industrial oils a correlation with the FRB index of production. The ratio used for automotive consumption in postwar years was 0.02 except in 1946 when 0.021 was used. Aviation oil consumption is based

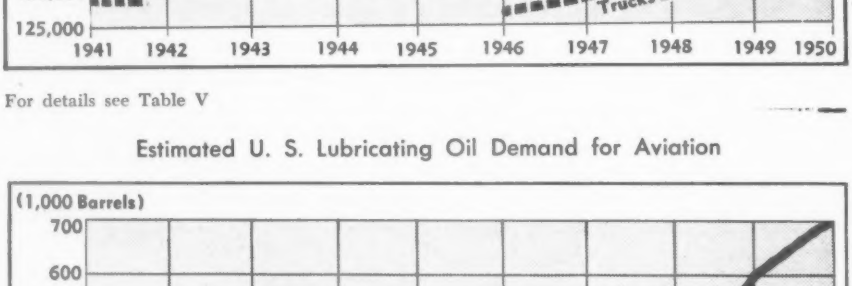
(*Continued on p.* 42)

Estimated U. S. Gasoline Demand by Passenger Cars, Trucks and Busses



For details see Table V

Estimated U. S. Lubricating Oil Demand for Aviation



For details see Table X

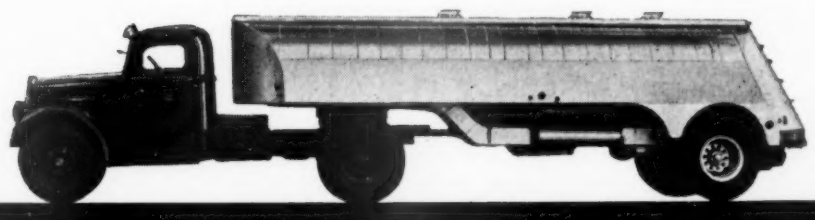
Girth Control

FOR BETTER BUOYS!

It's a neat trick—producing these identical twins to the close girth measure and other tolerances allowed by the Navy on all-welded, spherical steel buoys. Especially when we are called upon to bring so many into the world so fast!

But Eaton Metal Products have won two Army-Navy "E" Awards for excellent production standards. And the wartime speed production experience of trained EATON workers by the hundreds will stand you in good stead when the curtain rolls back on post-war activities. We will be ready to meet your requirements as we are now meeting the Navy's—on a high efficiency production basis. Our facilities have been enlarged, along with our "know how." We will be able to build—*better than ever*—the storage and transport equipment needed by the oil industry.

FOUR PLANTS TO SERVE YOU BETTER — OMAHA, DENVER, ALBUQUERQUE, BILLINGS



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BULK PLANTS

EATON METAL PRODUCTS

Improper Matching of Dual Tires Often Harmful, Rubber Company Warns in Timely Booklet

By Herb Taylor
NPN Staff Writer

According to some authorities 25% of all dual-tire failures are from lack of proper differential in air pressures or from improper matching of tires.

Oil marketers, who rate as one of the largest users of dual tires, who have been preaching proper air pressures, may be surprised at the stress put on this subject by the B. F. Goodrich Co. In a new booklet just released, "How to Prevent Truck Tire Failures", a great deal of space is devoted to this angle of tire conservation.

It is pointed out that when dual tires are improperly matched, more load is carried by the larger tire, causing that tire to be overloaded, often seriously enough to result in its early failure.

Flex breaks, fatigue failures, separation, and impact breaks, also described in the booklet, are often direct result of mismatching.

Truck owners are warned that rapid tread wear can also be caused by mismatching, and also that even perfectly matched tires may have different rates of growth in service. This last condition would be due to matching rayon and cotton tires together on duals. It is pointed out also that tires of different makes may have different rates of growth in service. A tire of one make may be almost smooth and have as large a diameter as another tire which shows very little wear. For that reason they should not be matched by the eye or by the amount of wear they show. They should be matched by their outside diameters or circumferential measurements.

Where it is necessary to mount two tires of different diameters on the same wheel, the smaller diameter tire should be placed on the inside position. On high crowned roads it has been found advantageous to place a tire ¼ in. to ⅜ in. smaller diameter on the inside.

* * *

Pretzel Tires

Oil marketers need not fret, say the experts, if they receive shipments of GR-S synthetic tires apparently out of shape. They are often distorted by lacing in box cars or trucks when shipped in cold weather. Storage at 70 deg. F., for a couple of days will put them back in good shape.

Storage recommendation for GR-S tires is the same as prewar tires: in a cool dark place. If convenient, they should be placed in a standing position.

* * *

Camelback

For the next few months, only grade "F" (reclaim rubber) camelback will be manufactured. WPB has stopped production temporarily of grade "C" (synthetic) for passenger recaps. Grade "C" recaps will continue to come through until available stock is used.

* * *

Sludge-Minded

Sales promotion men of the larger oil marketing companies have really found gold in "them thar sludge piles". The Sinclair Refining Co. in one of its trade publications likens sludge to an epidemic by which the motoring world is being menaced.

The epidemic, that company tells its dealers, is spread by rationed driving, which does not give motors an opportunity to heat up to normal operating temperature. It is an all-year condition, worse in cold weather, but a danger even summertime, Sinclair warns. The company then proceeds to give its dealers the Who, What, Why and When of the whole sludge problem. From all over the nation it picked up samples and made pictures of some of the "horrible examples", then wrapped stories around these pictures in language which a dealer will understand, and can pass onto the public.

A picture was shown of a ruined Buick motor in Philadelphia. The owner of this car, the story said, believed because the car was seldom used it was not necessary to change oil. The result was a sludge clogged screen that caused a bearing to be burnt out, broken pistons and broken connecting rods. Many other examples were discussed and illustrated.

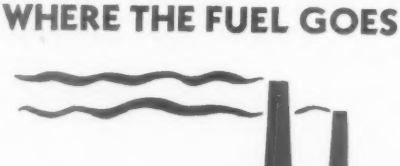
"Don't use mileage as the basis for oil changes—be governed by the time the oil has been in the crankcase," is the theme Sinclair dealers, the company's promotion says, backing up this advice with pictures of samples of clean oil in glass containers and by their side other glass containers containing oil drainings that have been run various distances and times. Typical rusted "dip sticks" caused by the presence of water in crankcase oil, due to little driving and condensation, were used as part of the promotion. Pictures of "blotter tests", showing oil used for various periods of time were also used.

Sinclair engineers explain the "How" by recommending that oil be drained while quite hot; followed by flushing oil, and then running the engine for a couple of minutes. This, they say, carries off the sludge and leaves the engine clean for a fresh charge of motor oil.

But the sales promotion department gets in the last word by urging dealers to tell motorists to "keep your eye on time instead of the speedometer", and to display contaminated oil in a glass jar beside another jar with clean oil.

* * *

WHERE THE FUEL GOES



A PLANT manufacturing airplanes in New England burns 800,000 gallons of fuel oil a month.

OWI

Goodyear Chemist Reveals Gains on Tire Synthetic

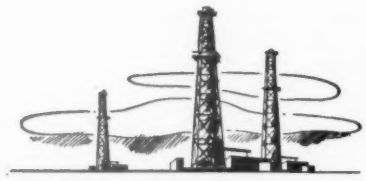
Development of a new synthetic rubber which may result in better automobile tires than are now being made from GR-S rubber was named as one of five achievements of Goodyear Tire & Rubber Co.'s program of research by Dr. L. B. Sebrell, director of the Goodyear research laboratory.

The new synthetic is a butadiene copolymer, as is the GR-S rubber, but it substitutes a new chemical for styrene with the result that it shows the energy resilience and crack growth resistance of natural rubber, Dr. Sebrell said. One disadvantage not as yet overcome in tests, he said, was that the new synthetic did not show high tensile strength at high temperatures. In addition, it is expensive to make. Test tires are now in process of manufacture and will be given road tests to measure actual performance in comparison with tires of natural rubber and GR-S.

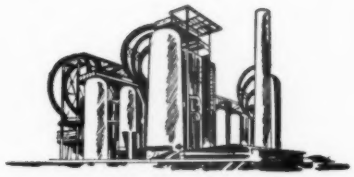
Lack of chlorinated natural rubber used in manufacture of paints, lacquers, bonding compounds for molding sands and adhesives has created a problem which, according to Dr. Sebrell, may be combatted by the use of a second synthetic rubber developed in the laboratory's experiments.

New methods of milling and processing GR-S rubber which extends its uses and the development of two new accelerations which speed up rate of vulcanization of GR-S rubber were listed by Dr. Sebrell as three other results of experiments. The new accelerators for GR-S are both aniline-amide derivatives. While captax is now being used to achieve the same purpose, Dr. Sebrell believes that the new accelerators will prove more efficient once their use is completely understood.

OIL — The Bloodstream of War!



Out of the rich earth of America, the mighty oil industry draws over four million barrels of crude oil each day—more than enough to fill the "Big Inch" Pipeline stretching from Texas to Pennsylvania.



Transported by tanker, tank car and pipeline to huge refineries, the crude oil is distilled or "cracked" and its multiple derivatives poured into the bloodstream of war . . .

Lubricants and fuels safeguard machines and engines, cool high-speed cutting tools, turn great turbines that light and power mill and factory —speed production of war goods.

Super Octane gasolene, incomparable achievement of the American petroleum industry, is being produced in fantastic quantity to provide command of the air for countless Allied bombers and fighters.

Synthetic rubber, to keep our home and fighting fleets rolling, is made largely from a pure chemical derivative of petroleum, Butadiene—the most important constituent of Buna rubber.

Safeguards for amphibious operations —special oils, waxes and greases shed water, help prevent the corrosive action of salt air, heat and moisture, and protect uniforms, shoes, tents, as well as guns and munitions.

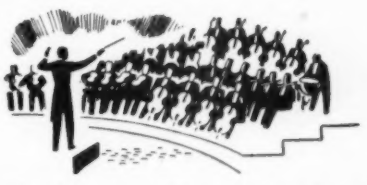
Insecticides and drugs, developed from petroleum, combat war's diseases and infections. Petroleum antidotes against the ravages of health and life are a vital force in the bloodstream of war.

Explosives, made with a petroleum chemical known as Toluene, signify the most direct, deadly use of oil as ammunition. Toluene makes T-N-T. T-N-T makes the enemy R-U-N.

New petroleum products are born every day—fight on every front. When the war is won, these developments of Petroleum Research will assure new and greater protection and comfort in your home of tomorrow.

This emblem appears on Cities Service industrial products. It is a stamp of warranty by Cities Service Research technologists. It is a symbol of care, integrity and reputation.

This is the motorist's sign of service . . . the sign of an honest businessman, able workman, and sincere friend. It is the sign of the best in automotive products and exclusive motoring aids. It pays to get acquainted with your Cities Service Dealer.



And this is "The Cities Service Concert"—oldest network program in radio—presenting the music all America loves, under the direction of Dr. Frank Black, and starring beautiful Lucille Manners. Listen Fridays, 8 P.M., EWT, over the NBC Network.

Oil is Ammunition
—Use it Wisely!

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NEW YORK · CHICAGO

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Were you ever in this predicament?

You're alone—something urgent regarding your compliance with a war order comes up—you must call Jones now, but you can't remember, for the life of you, what company the man's with. You look in the files for his last letter—but no Jones!

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Construction Digest Photos

George C. Stewart, Construction Digest, Indianapolis; E. W. McLain, Andresen Corp., Chicago; Edward Andresen, Andresen Corp., Chicago; M. S. Dutton, public works commissioner, Oak Park, Ill., in attendance at the first Illinois State Asphalt conference held in Springfield, Ill., Feb. 23-24.

Asphalt Versatility Praised At First Illinois Parley

Special to NPN

SPRINGFIELD, Ill. — First Illinois state asphalt conference held Feb. 23-24 at the Abraham Lincoln hotel here under the auspices of The Asphalt Institute, with an attendance of 438, heard industry speakers and state highway officials describe various means of stepping up the use of asphalt in both the present and postwar periods.

Asphalt was declared the most versatile construction material, long used on roads, streets, airports, playgrounds, parks, walks, crossings and for many other purposes. Prevost Hubbard, a chemical engineer representing the Institute, detailed the general agreement between the highway research board, U. S. Public Roads Administration and the Asphalt Institute of New York City, and mentioned that an investigation is to be conducted in an effort to obtain through field load bearing tests on full size pavement sections fundamental data on the load supporting value of asphaltic concrete pavement of various thicknesses.

Wesley W. Polk, chief highway engineer for Illinois, gave his experience with the use of asphalt on highways in this state, which he said had given excellent service, although some of the older pavements laid in 1915-20 were in need of repairs even before the war started. Many miles of it, he said, have been repaired by resurfacing with bituminous concrete. Illinois has 2000 miles of bituminous roads on its secondary system, he added, which has been constructed by the different counties using their motor fuel tax funds received from the State and Federal governments.

Bernard E. Gray of the Institute, discussed the "Construction and Resurfacing of Primary Highways," and representatives of various county highway systems talked on asphalt surfacing, maintenance work and the treatment of earth roads with road oil and asphalt. Six open forums held at different times and on different subjects gave convention delegates an opportunity to discuss their problems and advance new ideas.

Esso Club Joins Sigma Xi

ELIZABETH, N. J.—Esso Research Club, whose membership comprises chemists, physicists, engineers and other technical research and development personnel of companies associated with Standard Oil Co. (N. J.), has affiliated with Sigma Xi and will be installed by fraternity national officers April 26.

Frank S. Gilmore, the Asphalt Institute, Kansas City, Mo., H. C. Hettelsater, Harnischfeger Corp.; Bernard E. Gray, the Asphalt Institute, during a lull in business sessions of the first Illinois State Asphalt conference in Springfield, Ill., Feb. 23-24

Colonel Herbert W. Alden (Ordnance Reserve)

Dean of Axle Engineering

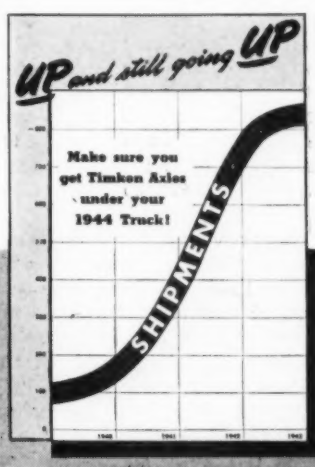
Chairman of the S.A.E. Ordnance Advisory Committee, Engineer Consultant to the Chief of Ordnance, winner of the Frank Scott Medal (1941) "as a leader among engineers for his services to national defense," twice President of the S.A.E., Col. Herbert W. Alden is the recognized dean of axle engineering.

Director of engineering of The Timken-Detroit Axle Company since 1909, Col. Alden heads an executive engineering staff with an aggregate experience of more than 700 years in the design and development of axles and brakes.

No other organization in existence can duplicate this specialized knowledge of load-carrying, load-moving and load-stopping problems in the truck, trailer and bus fields.

As the world's largest builders of axles and brakes for commercial vehicles, Timken has devoted this wealth of experience over a long period of years to the joint tasks of mechanizing and motorizing our modern army and improving the performance of motor transport.

The vast research and technical resources of the Timken-Detroit organization are available now to manufacturers of better vehicles for tomorrow.



TIMKEN AXLES

THE TIMKEN-DETROIT AXLE COMPANY, DETROIT, MICHIGAN

WISCONSIN AXLE DIVISION, OSHKOSH, WISCONSIN

TABLE VI—Estimated United States Residual Fuel Oil Demand

(1000 Barrels of 42 Gallons Each)

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Domestic Demand										
Navy	23,300	.....	.....	.....	.....	40,000	30,000	30,000	30,000	30,000
Heating Oil	46,700	.....	.....	.....	.....	53,000	53,000	55,000	58,000	60,000
All Other	315,339	.....	.....	.....	.....	300,000	310,000	319,000	328,000	333,000
Total	385,339	.....	.....	.....	.....	393,000	393,000	404,000	416,000	423,000
Less: Conversions to Coal	2,000	.....	.....	.....	.....	40,000	20,000	10,000	10,000	10,000
Net Domestic	383,339	.....	.....	.....	.....	353,000	373,000	394,000	406,000	413,000
Exports	13,828	.....	.....	.....	.....	13,000	10,000	6,000	4,000	2,000
Total Demand	397,167	412,619	468,700	479,800	432,700	366,000	383,000	400,000	410,000	415,000

TABLE VII—Estimated Number of Burners in Use and Heating Oil Consumption

Year	Burner Sales	Replacements and/or Junked	Conversions	Reconversions	In Use End of Year	Average In Use	Barrels 42's Demand Per Burner	Demand
1935	150,510	12,498	.....	.....	1,152,125	1,083,119	50	54,227,000
1936	220,075	31,525	.....	.....	1,340,675	1,246,400	56	69,249,000
1937	210,740	20,870	.....	.....	1,530,545	1,435,610	57	81,235,000
1938	179,360	42,160	.....	.....	1,667,745	1,599,145	52	82,388,000
1939	236,140	41,555	.....	.....	1,862,330	1,765,038	55	97,131,000
1940	302,210	29,415	.....	.....	2,135,125	1,998,728	58	115,533,000
1941	333,250	56,315	10,000	.....	2,402,060	2,268,593	53	120,908,000
1942	99,514	25,284	90,000	.....	2,386,290	2,434,438	50	121,506,000
1943	33,445	31,325	17,965	14,010	2,384,455	2,376,848	45	106,000,000
1944	25,000	50,000	.....	.....	2,359,455	2,371,955	45	106,000,000
1945	50,000	75,000	.....	.....	2,334,455	2,346,955	47	110,000,000
1946	200,000	75,000	.....	60,000	2,519,455	2,426,955	54	131,000,000
1947	400,000	75,000	.....	.....	2,844,455	2,681,955	54	145,000,000
1948	400,000	75,000	.....	.....	3,169,455	3,006,955	54	162,000,000
1949	350,000	75,000	.....	.....	3,444,455	3,306,955	52	172,000,000
1950	350,000	75,000	.....	.....	3,719,455	3,581,955	50	179,000,000

FORECAST NEW PEAKS

(*Continued from p. 36*)

on a ratio of 0.035 in 1941 and 0.022 in postwar years. The 1950 total estimated demand is only 12% higher than 1941 consumption.

Crude oil and products—Estimates assume that U.S. exports will decline as foreign sources of supply are developed. Domestic demand for crude and products in 1946 is only 3.7% less than in 1941, and in 1950 22% greater.

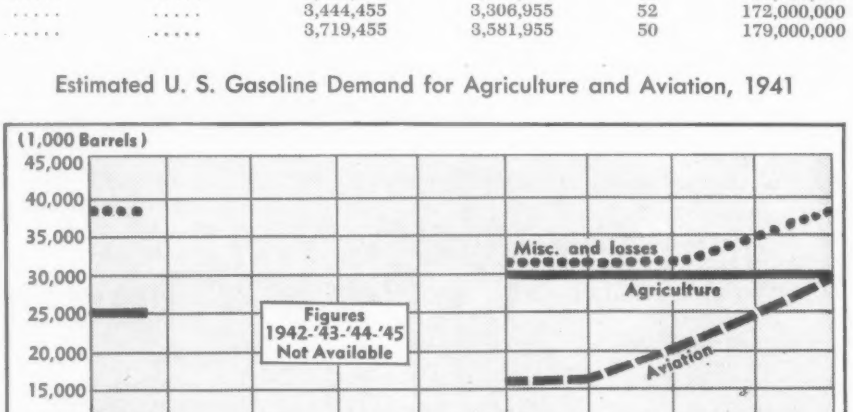
The estimates of total demand for crude and products are shown below:

Estimated Total Crude and Product Demand

Year	1000 Barrels	1000 Barrels Daily
1941	1,594,542	4,370
1942	1,559,378	4,270
1943	1,637,800	4,490
1944	1,748,400	4,780
1945	1,655,000	4,530
1946	1,540,700	4,220
1947	1,684,150	4,610
1948	1,772,500	4,840
1949	1,825,100	5,000
1950	1,872,800	5,130

"The above estimates indicate a demand in 1946 approximately 12% less than in 1944, the estimated peak war year, and only 3.4% less than in 1941. Subsequent to 1946 the estimates show consistent annual increases so that the 1941 demand is exceeded by 1947, and by 1950 it is 17.5% greater than in 1941. On a monthly basis the magnitude of the drop from the peak war demand to the minimum peacetime demand would, of course, be greater than the 12% indicated by the annual figures. For example, in November, 1943, the writer estimates that total demand was 4,880,000 barrels per day which is 100,000 barrels per day greater than the estimated average for the year 1944."

Estimated U. S. Gasoline Demand for Agriculture and Aviation, 1941



For details see Table V

TABLE VIII—Estimated United States Distillate Fuel Oil Demand

(1000 Barrels of 42 Gallons Each)

	DOMESTIC					
Year	Heating	Diesel	All Other	Total Domestic	Export	Total
1941	120,908	27,351	25,775	174,034	15,741	189,775
1942	121,506	.....	.....	.....	.....	205,473
1943	106,000	.....	.....	.....	.....	220,200
1944	106,000	.....	.....	.....	.....	230,000
1945	110,000	.....	.....	.....	.....	210,000
1946	131,000	33,000	26,000	190,000	10,000	200,000
1947	145,000	35,500	27,500	208,000	8,000	216,000
1948	162,000	37,500	28,500	228,000	6,000	234,000
1949	172,000	40,500	29,500	242,000	4,000	246,000
1950	179,000	42,500	30,500	252,000	2,000	254,000

(Additional tables and chart, p. 44)

Just a boy on a bicycle

The day is cold. Chill, too, is a youngster pedaling a bicycle around Richmond Refinery. He is collecting samples for constant quality tests at the laboratory. At one of his ports-of-call a man tosses over a pair of warm, wool-lined gloves. "Here, kid," he says, "you seem to need 'em."

Years flit. Some Standard Oilers are discussing the promotion won by a general favorite. One tells the story of the kid on the bike. He knows about it, for he was that shivering boy and the chap just promoted was the cold-weather friend who passed out the gloves. The one-time kid on the bike is happy over a grand break for a regular guy.

Of such people is this Company made up. We wish you could know them *all*. We wish you could think of our refineries less as pipes and stills and tanks, and more as Joe and Ed and Bill, who run them . . . of our wells as Red and Shorty, who get out the crude . . . of every tank-truck and service station in terms of the regular guys who man them.

As an army consists of men more than equipment, so Standard of California consists of people more than things. The men give an army its morale. Our people give Standard of California its character — its spirit. This Company is what its people are.

They are right people — man and boy and woman — honest, human, kindly people. Policy-makers at the top are yesterday's boys-on-bicycles . . . trucks . . . oil-rigs. All want to work for a company of which they can be proud. It follows as the night the day that Standard of California seeks to be a company its people can be proud to work for.

STANDARD OF CALIFORNIA

E flag, with 2 stars, awarded to our Richmond Refinery

TABLE IX

ESTIMATED UNITED STATES KEROSINE DEMAND

(1000 Barrels 42 Gallons Each)

Year	Domestic Demand	Exports	Total
1941	70,023	2,676	72,699
1942	.....	....	72,313
1943	.....	....	73,000
1944	.....	....	73,000
1945	.....	....	74,500
1946	72,000	6,400	78,400
1947	74,000	3,700	77,700
1948	76,000	2,600	78,600
1949	78,000	1,100	79,100
1950	80,000	600	80,600

TABLE X—Estimated U. S. Lubricating Oil Demand

(1,000 Barrels of 42 Gallons Each)

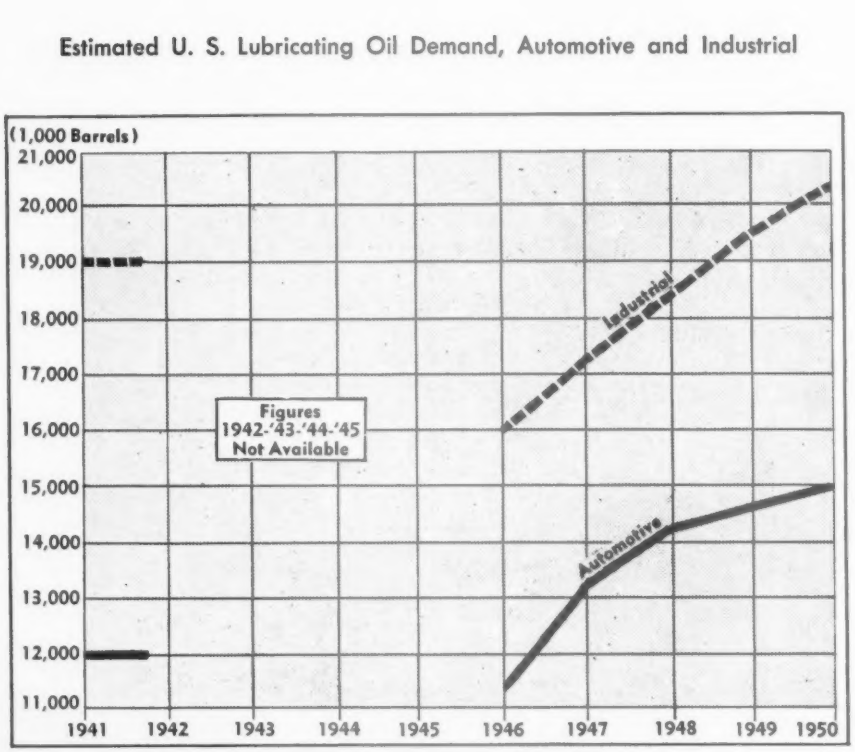
Year	DOMESTIC				Exports	Total Demand
	Automotive	Industrial	Aviation	Total		
1941	12,000	19,000	400	31,400	8,779	40,179
1942	.....	.....	...	.....	.....	37,329
1943	.....	.....	...	.....	.....	40,900
1944	.....	.....	...	.....	.....	45,600
1945	.....	.....	...	.....	.....	44,800
1946	11,400	16,000	400	27,800	10,000	37,800
1947	13,200	17,200	400	30,800	9,650	40,450
1948	14,200	18,400	400	33,000	9,400	42,400
1949	14,600	19,600	600	34,800	9,200	44,000
1950	15,000	20,200	700	35,900	8,900	44,800

TABLE XI—Estimated United States Crude and Product Demand

(1000 Barrels of 42 Gallons Each)

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Domestic Demand										
Gasoline	670,577	.....	.....	.....	.....	620,000	739,000	794,000	820,000	850,000
Residual Fuel Oil	383,339	.....	.....	.....	.....	353,000	373,000	394,000	406,000	413,000
Distillate Fuel Oil	174,034	.....	.....	.....	.....	190,000	208,000	228,000	242,000	252,000
Kerosine	70,023	.....	.....	.....	.....	72,000	74,000	76,000	78,000	80,000
Lubricating Oils	31,400	.....	.....	.....	.....	27,800	30,800	33,000	34,800	35,900
Crude Oil, Misc., and Losses	164,142	.....	.....	.....	.....	175,000	180,000	185,000	190,000	195,000
Total	1,493,515	.....	.....	.....	.....	1,437,800	1,604,800	1,710,000	1,770,800	1,825,900
Exports										
Gasoline	24,076	.....	.....	.....	.....	29,500	20,000	16,500	15,000	12,500
Residual Fuel Oil	13,828	.....	.....	.....	.....	13,000	10,000	6,000	4,000	2,000
Distillate Fuel Oil	15,741	.....	.....	.....	.....	10,000	8,000	6,000	4,000	2,000
Kerosine	2,676	.....	.....	.....	.....	6,400	3,700	2,600	1,100	600
Lubricating Oils	8,779	.....	.....	.....	.....	10,000	9,650	9,400	9,200	8,900
Crude Oil	32,225	.....	.....	.....	.....	30,000	25,000	20,000	20,000	20,000
Miscellaneous	3,702	.....	.....	.....	.....	4,000	3,000	2,000	1,000	900
Total	101,027	.....	.....	.....	.....	102,900	79,350	62,500	54,300	46,900
Total Demand										
Gasoline	694,653	624,092	617,700	700,000	675,000	649,500	759,000	810,500	835,000	862,500
Residual Fuel Oil	397,167	412,619	468,700	479,800	432,700	366,000	383,000	400,000	410,000	415,000
Distillate Fuel Oil	189,775	205,473	220,200	230,000	210,000	200,000	216,000	234,000	246,000	254,000
Kerosine	72,699	72,313	73,000	73,000	74,500	78,400	77,700	78,600	79,100	80,600
Lubricating Oil	40,179	37,329	40,900	45,600	44,800	37,800	40,450	42,400	44,000	44,800
Crude Oil, Misc., and Losses	200,069	207,552	217,300	220,000	218,000	209,000	208,000	207,000	211,000	215,900
Total Demand for Crude and Products	1,594,542	1,559,378	1,637,800	1,748,400	1,655,000	1,540,700	1,684,150	1,772,500	1,825,100	1,872,800

Estimated U. S. Lubricating Oil Demand, Automotive and Industrial



For details see Table X

Jersey Standard Gets Eight New Tankers on Trade-In

NPN News Bureau

WASHINGTON—The U. S. Maritime Commission this week announced that the Standard Oil Co. of New Jersey is purchasing eight 14.5-knot tankers now being built for the commission by the Sun Shipbuilding & Dry Dock Co. at Chester, Pa.

Under the agreement the purchaser is trading in 15 old tankers for an allowance of $10,778,640 on the purchase of about $24,000,000. The War Shipping Administration, for which the old tankers are being operated, can continue them in service so long as deemed necessary in the war effort.

The new tankers are nearing completion in two yards at Chester and deliveries will begin next month. The names are: Esso Portland, Esso Springfield, Esso New Haven, Esso Utica, Esso Camden, Esso Scranton, Esso Memphis, and Esso Roanoke.

Cost of each new tanker, less national defense features, is estimated at $3,000,000. New Jersey Standard's down payment will be the trade-in value of the old vessels and cash from the company's construction reserve fund to make up 75% of the total purchase price. The balance will be covered by mortgage notes.

REPORT ON OIL POLICY

(*Continued from p. 5*)

private exploration efforts abroad as well as at home.

2. *Production of crude oil on a conservation basis provides at minimum cost a natural reserve available for immediate expansion in an emergency*:

(a) When the nation's production is on the basis of optimum-rate as defined above, it will always be possible to produce at a greater rate for a short time without serious damage to the fields. This available excess rate of production plus the substantial percentage by which domestic consumption can be curtailed in wartime without serious harm to the domestic economy adds up to a large volume of emergency oil available in time of war.

(b) It is recommended that the optimum-rate principle already in wide use be extended to become universal practice in all producing states. This principle should also be extended in foreign operations.

3. *Stock-piling of crude oil and its products in sufficient volume to be of importance for national security would not in fact promote true national security*:

(a)The quantities of oil needed by a war economy are so large that the above-ground storage of sufficient oil to be significant would be incredibly costly. For example, the approximate volume of crude oil now being used by the United States for war purposes is approaching 1,500,000 barrels daily. Four years emergency supply at this rate would be over 2 billion barrels. Storage above ground of over 2 billion barrels of crude oil and refined products would cost $8,000,000,000 to $13,000,000,000 if held for 20 years.

(b) Huge above-ground storage which might be turned loose on the industry at any time, in addition to its enormous cost, would be a continuous threat to the oil economy and thereby discouraging to the first basic principle of continuing, vigorous industry search for oil.

(c) The special storage of blending agents for the manufacture of aviation gasoline would be practicable on a moderate scale, but as the requirements of the engine of the future may undergo radical change, special attention should be accorded this probability before reaching a decision.

4. *The importation of oil and pumping it into depleted or partially depleted oil or gas fields in the United States is impracticable*:

(a) In addition to the matter of excessive costs, these supplies would not be quickly recoverable for emergency use and a substantial portion of the oil would be lost in the sands.

5. *Locking up proven reserves by the process of suppression of existing production, or by acquisition of proven oil fields by purchase or condemnation would be harmful to the hope of a continued, vigorous domestic industry*:

(a) The arbitrary cut-back of production below the optimum-rate or reasonable market demand would violate democratic principles and, by constituting a threat to the market upon any subsequent change in policy, discourage oil finding by its effect in increasing the commercial risks.

(b) To bear any sensible relation to a daily production rate worth having as an emergency measure, the volume of production that would have to be acquired or shut-in would run into the billions of barrels of shut-in reserves. For example, if we assume that, on an average maximum efficient rates would produce fields on a 20-year basis, we would be compelled to have proven oil reserves held out to the amount of 7300 barrels for every one barrel of daily emergency production. Therefore, 1,500,000 barrels a day of available emergency production, by this method, would require taking out of the domestic economy billions of barrels of proven reserves. The paralyzing effect of any such action upon the vigor of oil finding is obvious from the mere statement of the situation.

(c) Arbitrary cut-back of production rates on any equitable basis by any rational methods would require an immense government force which would have to follow in detail the technique of every oil well in the country in order to say what each well could produce. Thereby all state authority would be overstepped and all oil operations reduced to government-managed operations in every detail.

If proven oil fields, which means fields with a large number of wells completed thereon and ready to produce, are reserved in large volume, as stated, there would have to be continued expense in constantly testing and observing the wells and keeping the properties in shape for production without delay when emergency arises. This necessity, coupled with the great difficulties of keeping privately-owned production shut back throughout the country, would doubtless result in the creation of the most enormous body of government employes ever engaged on a single project.

(d) Arbitrary cut-back of production or keeping larger reserves out of production would be valueless except by taking measures for maintaining excess refining and transportation capacity, to make such suppressed reserves available for emergency use. For example, a production of 1,500,000 barrels a day in excess of refining capacity obviously would be useless in emergency until all of this extra refining capacity could be built. This again emphasizes the good sense of depending upon obtaining extra production in emergency by the elasticity available by optimum-rate production capacity, as explained above, plus restrictions of domestic use in wartime, rather than upon such delusions as these grandiose ideas of enormous suppressions and locked up reserves.

(e) Such arbitrary cut-back methods would so disrupt the orderly productive processes as to amount to the nationalization of the entire industry.

6. *The public lands should be kept open to private development*:

(a) The present policy of leasing the public domain for oil and gas exploration should be continued, with some liberalizing of the statutes, rules, and regulations, having due regard for the interest of the United States as a proprietor, but designed to encourage rather than to retard or hamper developments.

7. *The present naval reserve acreage should not be increased*:

(a) The fallacy of naval reserves of oil is the same as that involved in the idea of locking up a large volume of crude oil production capacity. Experience in this war has shown that Naval oil reserves in an undeveloped condition are of practically no value in emergency.

(b) Oil reserves for use in time of war, both Naval and Army, can be most reliably obtained by a continued, vigorous oil finding effort, with production in the United States at the optimum-rate as defined, plus the ability to cut back domestic consumption, and the having of large surplus reserves in countries which are the surest of being physically accessible in time of emergency.

8. *Imports of oil should be handled in an orderly and flexible manner*:

(a) Our import policy, involving such questions as tariffs and quotas, should be kept flexible, so as to be readily adjusted from time to time to meet domestic needs and general economic requirements.

(b) The general principle of optimum-rate production for domestic oil fields will provide the basis for determining the economic need for imports, and to the extent that our requirements exceed such measure of domestic producibility, imports will be needed and will create economic balance.

(c) Imports in excess of economic needs and not required in the national interest, will create conditions harmful to search for new oil fields and the continuation of technologic progress in production and refining.

9. *The oil industry has constantly advanced in the science of finding, producing, and refining oil*:

(a) This constant technological improvement should be encouraged. It has been the means whereby our oil reserves have been vastly increased and the production of the most necessary products from crude greatly improved.

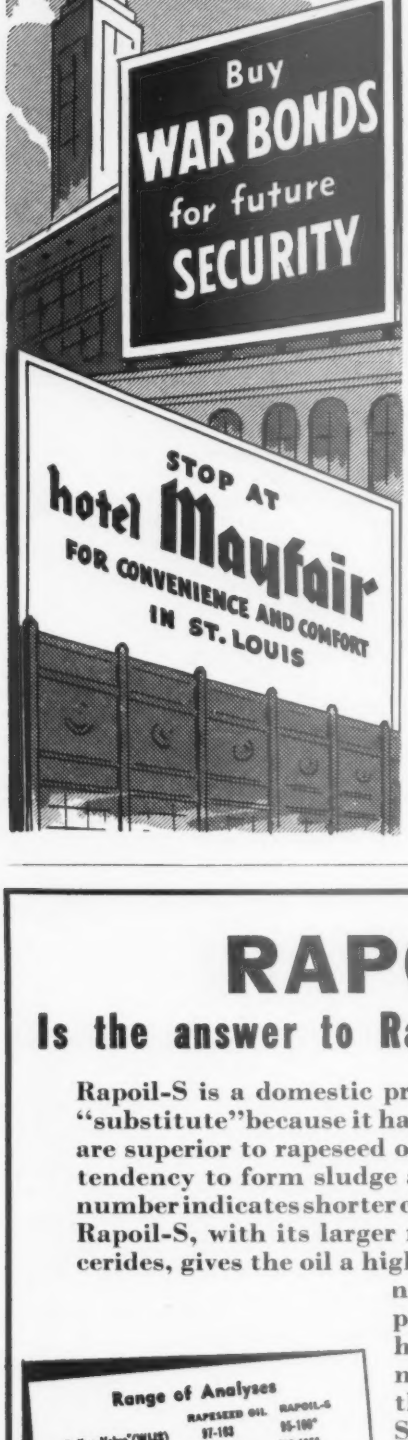
(b) Technological advance has been one of the driving forces evident between World Wars I and II and responsible for the preparedness of the oil industry to meet the needs of modern mechanized warfare for oil in the quantity and kind demanded.

(c) The static view of our proven oil reserves as amounting to only so many years' supply is completely misleading and such calculations are capable of

Safety Reminder No. 10

Prepared for NPN by National Safety Council

Gasoline station attendant should stand safely away from approaching cars as they near pump



doing great damage to our future oil situation. The proven reserve is merely a given point in a moving inventory. The static estimate takes no account of all the dynamic factors that have been all important in meeting our requirements.

(d) The domestic proven oil reserve has declined less than one-tenth of one per cent during the second year of our participation in the war, having actually increased the first year, while the oil reserves of our nationals abroad have steadily increased.

(e) The proven domestic crude oil reserves, officially stated at approximately 20 billion barrels, understates the true conditions: It does not include oil in unproved portions of proven fields, casinghead gasoline, oil that may become available by secondary recovery methods, oil yet to be discovered, and the oil equivalent of available natural gas. These additions will be very large, doubtless exceeding our discoveries to date. Nor does the estimate include the oil which may be recovered beyond the present estimates of proven oil in proven fields by reason of the constantly improving techniques in primary production methods. Such estimates are based on the amounts of oil recoverable at present prices by present recovery methods. Such estimates also take no account of the oil that may be extracted or synthetized from vast deposits of other carbon resources, such as coal and oil-shales.

(f) The technology of converting natural gas into gasoline is so close to a commercial status at present values that its utilization when needed can be left to the efforts of private enterprise.

(g) The techniques involved in the manufacture of oil products from oil-shale and coal, while entirely practical from an engineering viewpoint, represent costs substantially above present values and therefore are not commercial until oil prices rise substantially or these costs have been reduced. Because of this time gap, it might be appropriate for the government to carry on technological developments to a reasonable degree, although such efforts would be more advantageously directed to development research than to large-scale installations, especially pending the acquisition of synthetic techniques developed in Germany during the war. The government might also inaugurate extensive investigations in the classification of oil-shale deposits by grades, and in the problems and costs of mining oil-shale. At the same time, considerable industry research is under way in this field and if oil rises in value there will be a natural intensification of these efforts.

(h) Discovery of oil in the United States has received renewed impetus from time to time from the development of new exploration techniques. The sequence has been surface geology, core-drilling, sub-surface correlations, the refraction seismograph, the reflection seismograph, soil analysis, and many others. Discovery would be greatly facilitated by the development of a new exploration tool. While this field is being vigorously prosecuted by the industry, the technical advances in many fields have been so accelerated by the war that the government could be genuinely helpful by directing funds to basic researches seeking to develop new principles which might be useful in exploration.

10. *Easily accessible foreign reserves in friendly nations and owned and operated by United States nationals offer the greatest possible help for emergency needs*:

(a) Special thought should be given to increasing the already large reserves of this type by measures designed to augment the confidence, trust, and friendliness of nations in the Western Hemisphere.

(b) Any policies making for the impairment of the confidence of our neighbors through the direct or indirect participation of our government in any phase of the oil business, either here or abroad, whether in production, transportation, refining, or marketing, should be avoided.

11. *The national security and economic stability of the United States can be greatly enhanced by adequate world oil developments, under the leadership of United States nationals*:

(a) The principles and procedures submitted on Nov. 4, 1943, to the Petroleum Administrator for War by Foreign Operations Committee advisory to the Administrator, in a document entitled "A Foreign Oil Policy for the United States," is recommended as a clear and acceptable policy. (*See NPN Dec.* 15, 1943, *P.* 3)

(b) The government is urged to give full consideration to this document,

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Range of Analyses

	RAPESEED OIL	RAPOIL-S
Iodine Value (WIJS)	97-103	95-100*
Saponification Number	170-180	190-195*
Molecular Weight	About 1000	About 1020
F.F.A. (As Oleic)	2%	2%
	BLOWN RAPESEED	BLOWN RAPOIL
Viscosity-Saybolt at 210° F.	900-1000 sec.	900-1000 sec.
Iodine Value	55-60	45-50*
Saponification Number	225	230
F.F.A. (As Oleic)	5-7%	7-8%

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which has the endorsement of the National Oil Policy Committee.

(c) An international instrument of consultation and collaboration, without power of enforcement and in which there is joint government-industry representation, is deemed essential to further world oil developments on a basis of mutual respect.

III. Conclusions

1. *The public interest in oil can best be served by a vigorous competitive industry, guided by private initiative*:

(a) A proper degree of regulation in the interest of conservation and orderly production is recognized and has already been applied in this country. Similar practices may be encouraged in foreign developments, with their international complications only through some form of international voluntary cooperation.

(b) Improvised and hastily conceived measures so much in the public eye today can do immeasurable harm to our economy and wreck all efforts to form a proper oil policy.

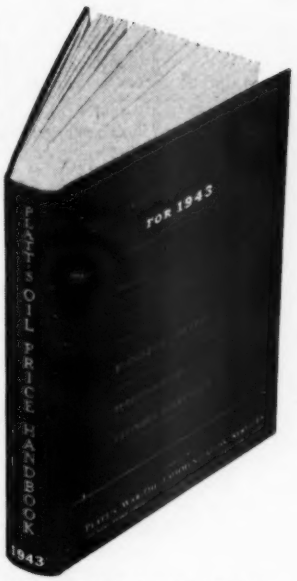
2. *Our oil future cannot be charted in advance: our best procedure is to maintain a vigorous, dynamic oil industry competent to meet the problems as they arise and able to create new approaches through dynamic action*:

(a) No field of endeavor more definitely requires initiative and multiple effort than oil. To stifle these factors would be to court disaster.

(b) At the close of World War I, crude oil production in the United States was approximately one million barrels per day and our proven crude oil reserve was six billion barrels. As previously stated, a future oil shortage was indicated. Many plans for meeting this expectation were discussed and many proposals for government intervention made. Experience has shown that all such measures would have been in error.

In the issue of NATIONAL PETROLEUM NEWS, May 22, 1918, (p. 6) there appeared a discussion of the coming oil shortage, and of possible need of "the government creating vast storage of gasoline and lubricating oils against the oil industry not being able to find another Cushing field in the next year or two." No shortage occurred and, due largely to American oil, every vital Allied need for petroleum was met.

After World War I, during which the oil industry along with American industry generally was under wartime government regulations and restrictions, there was some agitation to retain certain government controls over the oil industry but wisely this was not done and the Fuel Administration gave up all wartime control over the oil industry on May 15, 1919. However, in that year there was a campaign conducted for the "nationalization" of the fuel resources of the country including oil (NATIONAL PETROLEUM NEWS, June 4, 1919, p. 19). Josephus Daniels, Secretary of the Navy, made a plea for "the nationalization of oil 'for future protection of American interests on the sea" at the annual dinner of the American Society of Naval Engineers, December 17, 1920 (*N. Y. Commercial, December* 20, 1920). Fortunately nothing came of nationalization proposals. Similar attempts today would



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be equally erroneous. Since then the industry through its own efforts has been able to meet an ever mounting demand as a result of striking advances in the operating techniques and these advances have been accomplished by the free interplay of competitive forces in this dynamic industry.

(c) The oil industry's ability to provide 100-octane gasoline for the mounting thousands of planes now successfully fighting for domination in the skies over Germany and occupied Europe and overpowering the Japanese air strength in the South Pacific; to make toluene for the TNT in block-buster bombs; to produce butadiene and thus aid in the development of our synthetic rubber industry; to make the lubricants, fuels and many other products indispensable to the vast war machine of the United States, lies fundamentally in the initiative and enterprise, resourcefulness and pioneering spirit demonstrated by the industry during the years between the close of the last war and the beginning of the present war.

As they have contributed to the security of the nation in the present emergency, so do the lessons learned in that period relative to conservation of oil, efficient production methods, how far government aid can go and where it must end and other vital matters provide the surest answers to the establishment of a national oil policy in the public interest.

3. *The domestic oil industry needs no further Federal administrative machinery*:

(a) For over a decade, the oil industry has been operating under one of the most effective and efficient industrial policies in our entire economy. This system needs freedom to evolve further, and anything to impair it or destroy it would prove unfortunate, if not disastrous.

(b) Important elements which implement the effective and efficient industrial oil policies referred to include:

State conservation laws
The Interstate Oil Compact
Connally "hot oil" law
Bureau of Mines certification of market demand to state authorities
Federal tax policy on depletion

All have received thorough public scrutiny and Congressional approval and have proved themselves over a considerable period as to their soundness both in relation to the public interest and to the stability of the national economy. All should be continued.

(c) Comprehensive state conservation laws effectively administered are essential.

(d) The emergency controls necessary to the successful conduct of the war should expire with the emergency.

4. *The operations of United States nationals in foreign fields need diplomatic support and machinery for international consultation*:

(a) Our nationals operating in oil abroad need to have the political risks reduced by intelligent and sympathetic diplomatic support by the government. This does not mean government participation which should be rigorously avoided in any phase of their operations.

As with the domestic situation, there is a remarkable parallel in the international oil situation at the end of World War I and today. Statements that the drain on United States oil production and reserves would mean that soon this country would have to get most of its petroleum supplies from foreign countries were given wide publicity. These were seized upon as reason why the government should develop an oil policy that would include government participation in foreign oil operations.

In January, 1921, a bill was introduced in Congress for an export oil embargo from the United States to any country discriminating against American oil interests (*N. Y. World, Jan.* 18, 1921). The question of national spheres of interest and national oil monopolies was fiercely debated in the press, with "closed door" advocates heard at home and abroad. For several years after World War I the need for encouragement of American industry in the development of foreign oil sources was the subject of our State Department representation on many fronts, and fortunately for the world the "open door" policy won out in most countries. This has enabled world production largely under free competitive enterprise to increase from 503,515,000 barrels in 1918 to 2,224,882,000 barrels in 1941, or 341.87 percent. U. S. increased its annual production from 355,928,000 barrels to 1,402,228,000 barrels, or 293.96 percent. The countries outside the United States increased their annual production from 147,587,000 barrels to 822,654,000 barrels, or 457.40 percent.

(b) The varying and conflicting oil policies of the various nations need to be brought into harmony with the objective of orderly and efficient world oil development. To this end, international machinery is necessary. The Government of the United States should take the lead in bringing about this necessary coordination.

5. *The Government of the United States should develop deliberately and only after mature study, an oil policy, both domestic and foreign, based upon experience, knowledge, and insight*:

(a) Such a policy cannot be successfully formulated without consultation with the industry and should not be so attempted.

(b) All measures determinative of postwar policy, should be held in abeyance until a final policy is determined.

(c) It is particularly urged that no definite action be taken by any arm of the government committing the people of our nation to long-range future entanglements of a grave and indeterminate character in foreign countries, without first having these proposed commitments considered and approved by the Congress of the United States.

Oil Compact To Meet April 3-4

Special to NPN

NEW ORLEANS—Due to congested hotel conditions the dates of the Interstate Oil Compact Commission's New Orleans quarterly meeting have been changed to April 3 and 4. Headquarters will be at the Roosevelt Hotel here. The Roosevelt, New Orleans, St. Charles and Jung Hotels will provide rooms for the meeting. Committee meetings and general sessions will be held at the Roosevelt.

Coming Meetings

MARCH

Oil Heat Institute, annual meeting, Commodore Hotel, New York, N. Y., Sun.-Tues., March 12-14.

American Petroleum Institute, Pacific Coast Dist., Div. of Production, Biltmore Hotel, Los Angeles, Cal., Thurs., March 23.

Empire State Petroleum Assn., Inc., spring meeting, Hotel Onondaga, Syracuse, N. Y., Wed.-Thurs., Mar. 22-23.

Tennessee Oil Men's Assn., meeting, Hotel Hermitage, Nashville, Tenn., Sun.-Tues., March 26-28. Attendance of equipment manufacturers and suppliers by credential only.

Western Petroleum Refiners' Assn., 32nd annual meeting, Jefferson Hotel, St. Louis, Mo., Tues., March 28.

APRIL

Interstate Oil Compact Commission, New Orleans quarterly meeting, Roosevelt Hotel, New Orleans, La., Mon.-Tues., April 3-4.

Natural Gasoline Assn. of America, annual meeting, Baker Hotel, Dallas, Wed.-Fri., April 12-14.

American Petroleum Institute, Eastern Division, Div. of Production, Deshler-Wallick Hotel, Columbus, Ohio, Thurs.-Fri., April 13-14.

National Petroleum Assn., 41st semi-annual meeting, Hotel Cleveland, Cleveland, Ohio, Thurs.-Fri., April 20-21.

Ashland Oil & Refining Profit Drops; Reserves Increased

Special to NPN

ASHLAND, Ky. — After providing for federal and state income and excess profit taxes of $818,000, Ashland Oil & Refining Co. reports net profit for the year ended Sept. 30, 1943, of $733,865.52, compared with $1,103,605.32 for 1942, or 71 cents a common share in 1943, compared with $1.09 in 1942.

Paul Blazer, president, in the annual report to stockholders, explains that the reduction in the indicated current earnings was largely due to exploratory drilling, which added almost 50% to the company's oil production. Oil reserves, he says, have a higher value than is reflected in the company's books.

The report says present price ceilings for crude oil are not sufficient to cover fully the costs of finding new fields.

Of the proposed crude oil price increase of 35c per barrel, which has been the subject of a controversy for more than a year, Mr. Blazer says that the solution is made more difficult by the fact that large current earnings are being reported by oil companies having low cost, underground oil reserves which were discovered when the cost of finding oil was less than at this time. The rapid depletion of their reserves, he asserts, to meet wartime demands for petroleum products, has resulted in large current earnings for so many companies that it has been impossible to convince certain governmental agencies that general price increases are needed.

As of Sept. 30, the company reports total current assets of $5,517,777, and current liabilities of $2,780,556. In 1942, current assets were $5,170,131, and current liabilities $2,427,155. In the year $1,208,754.62 was spent for new properties and equipment. The company now owns and operates seven towboats and 34 oil barges.

Refinery Operations

(American Petroleum Institute figures in thousands of barrels of 42 gallons each. Figures include reported totals plus an estimate of unreported amounts and are therefore on a Bureau of Mines basis.)

Districts	Daily Potential Refining Capacity Week Ended Feb. 26	Daily Potential Refining Capacity Week Ended Feb. 19	Per Cent of Refining Capacity Reporting Week Ended Feb. 26	Per Cent of Refining Capacity Reporting Week Ended Feb. 19	Daily Average Crude Runs to Stills Week Ended Feb. 26	Daily Average Crude Runs to Stills Week Ended Feb. 19	Per Cent of Reporting Capacity Operated Week Ended Feb. 26	Per Cent of Reporting Capacity Operated Week Ended Feb. 19
Combined**	2,448	2,448	90	90	2,193	2,138	89.6	87.3
Appalachian (Dist. No. 1)	130	130	83.9	83.9	104	100	80.0	76.9
Appalachian (Dist. No. 2)	47	47	87.2	87.2	57	50	121.3	106.4
Ind., Ill., Ky.	824	824	85.2	85.2	765	768	92.8	93.2
Okla., Kans., Mo.	416	416	80.1	80.1	337	348	81.0	83.7
Rocky Mt. (Dist. No. 3)	8	8	26.9	26.9	12	12	150.0	150
Rocky Mt. (Dist. No. 4)	141	141	58.3	58.3	86	92	61.0	65.2
California	817	817	89.9	89.9	823	823	100.7	101.8
Total U. S.—B. of M. Basis	4,831	4,831	87.1	87.1	4,377	4,404	90.6	91.2
U. S.—B. of M. Basis Feb. 27, 1943					3,683			

Districts	Gasoline Production at Refineries Inc. Natural Blended Week Ended Feb. 26	Gasoline Production at Refineries Inc. Natural Blended Week Ended Feb. 19	Stocks of Finished and Unfinished Gasoline Week Ended Feb. 26	Stocks of Finished and Unfinished Gasoline Week Ended Feb. 19	Total Stocks Gas Oil & Distillates Week Ended Feb. 26	Total Stocks Gas Oil & Distillates Week Ended Feb. 19	Total Stocks Residual Fuel Oil Week Ended Feb. 26	Total Stocks Residual Fuel Oil Week Ended Feb. 19
Combined**	6,349	6,380	37,164	36,919	15,156	15,388	14,849	15,184
Appalachian (Dist. No. 1)	337	294	2,177	2,059	847	738	192	170
Appalachian (Dist. No. 2)	172	179	1,179	1,207	362	356	211	215
Ind., Ill., Ky.	2,687	2,679	19,077	18,432	6,007	5,921	2,964	3,011
Okla., Kans., Mo.	1,203	1,266	8,152	7,881	1,599	1,696	1,238	1,250
Rocky Mt. (Dist. No. 3)	37	34	76	73	20	20	31	30
Rocky Mt. (Dist. No. 4)	291	340	1,980	1,920	364	365	567	582
California	2,107	2,154	15,443	15,440	9,411	9,225	31,335	32,523
Total U. S.—B. of M. Basis	13,183	13,526	85,248*	83,931	33,766	33,809	51,387	51,948
U. S.—B. of M. Basis Feb. 27, 1943	10,565		92,772		35,691		70,516	

*Finished 74,386,000 bbl.; Unfinished 10,412,000 bbl.
**Includes East Coast, Inland Texas, Texas Gulf, Louisiana Gulf, and North Louisiana-Arkansas districts.

U. S. Crude Oil Production

(American Petroleum Institute figures)

	WEEK ENDED Feb. 26 Barrels (Daily Average)	WEEK ENDED Feb. 19 Barrels (Daily Average)
Oklahoma	324,500	325,400
Kansas	279,700	268,050
Nebraska	1,350	1,100
Texas	1,916,250	1,909,650
Louisiana	359,200	360,300
Arkansas	78,800	78,750
Mississippi	43,350	42,600
Illinois	206,950	211,100
Indiana	13,150	12,450
Alabama	25	25
Florida	50	50
Eastern (Ill., Ind. & Ky. excluded)	72,250	68,700
Kentucky	19,500	20,100
Michigan	52,100	53,500
Wyoming	93,850	95,400
Montana	20,800	20,950
Colorado	7,250	6,900
New Mexico	112,900	112,850
California	821,300	796,700
Total, U. S.	4,423,275	4,384,500

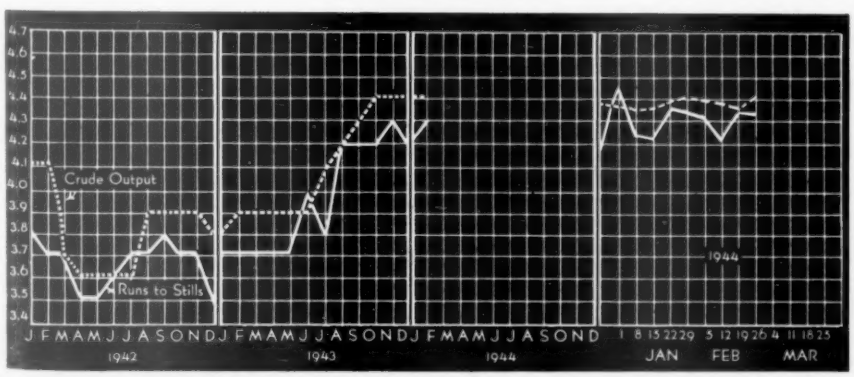
Crude Oil Stocks

(Bureau of Mines Figures in thousands of bbls.)

Grade or Origin	Feb. 26	Feb. 19	Change from Feb. 19
Penna. Grade	2,384	2,345	+ 39
Other Appalachian	1,345	1,386	— 41
Lima-Michigan	982	943	+ 39
Illinois-Indiana	13,053	13,133	— 80
Arkansas	2,804	2,873	— 69
Kansas	7,888	7,629	+259
Louisiana:	14,471	14,653	—182
Northern	4,041	4,345	—304
Gulf Coast	10,430	10,308	+122
Mississippi	845	1,071	—226
New Mexico	7,397	7,467	— 70
Oklahoma	32,133	32,150	— 17
Texas:	115,613	115,353	+260
East Texas	23,687	23,135	+552
West Texas	30,150	29,593	+557
Gulf Texas	34,101	34,877	—776
Other Texas	27,675	27,748	— 73
Panhandle	6,362	6,409	— 47
North	5,681	5,771	— 90
South	5,698	5,854	—156
Other	9,934	9,714	+220
Rocky Mountain	10,406	10,472	— 66
California	26,302	26,662	—360
Foreign	1,514	1,374	+140
Total gasoline-bearing in U. S.	237,137	237,511	—374
Heavy in California	6,588	6,662	— 74

Crude Production & Runs to Stills

(Millions of Barrels)



N.P.N. Gasoline Index

	Dealer T.W. Cents Per Gal.	Tank Car Cents Per Gal.
March 6	10.51	6.65
Month ago	10.51	6.65
Year ago	10.33	6.69

Dealer index is an average of "undivided" dealer prices, ex-tax, in 50 cities.

Tank car index is weighted average of following wholesale markets for regular-grade gasoline, FOB refineries or terminals: Okla., Mid-Western, W. Penna., Calif., N. Y. Harbor, Philadelphia, Jacksonville, Boston and Gulf Coast.

Pennsylvania Crude Runs

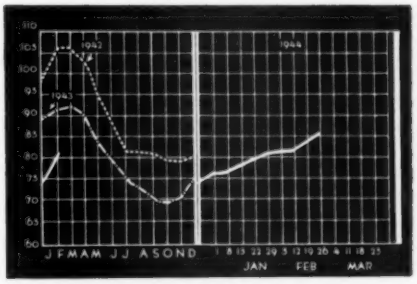
(Compiled by National Petroleum Assn. from reports of all companies refining Pennsylvania crude. Figures in bbls.)

DAILY AVERAGE

Week Ended Feb. 26, 1944	Week Ended Feb. 19, 1944	Week Ended Feb. 27, 1943
65,049	65,779	77,271

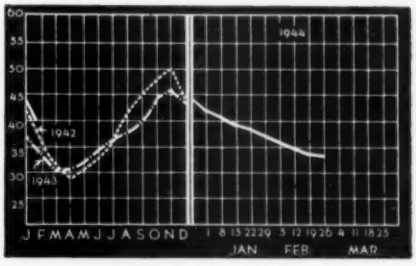
Gasoline Stocks

(Millions of Barrels)



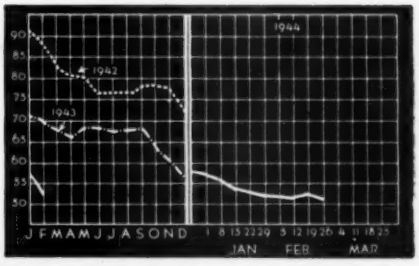
Gas Oil & Distillate Stocks

(Millions of Barrels)



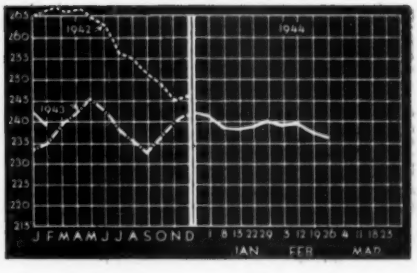
Residual Fuel Oil Stocks

(Millions of Barrels)



Crude Oil Stocks

(Millions of Barrels)



Market Reports

CALIFORNIA — Prolonged cold weather has aggravated the stove oil situation. Smudging for citrus is mainly responsible for the heavy drain on the product. Most refiners are getting 5c for stove oil delivered. However, some has sold as low as 4c at the refinery. Gasoline and fuel oils continued in heavy demand. All refiners asking ceiling price on fuel oil. Some independents are selling gasoline at one cent under major tank wagon delivered price.

° ° °

MID-WEST—Agricultural orders began to come in last week with tractor fuels getting the strongest call. Bulk station storage facilities were being converted from heating oils to gasoline and attempts were being made to fill them as farm season begins to get under way.

Heating oil movement slowed down somewhat but still remained strong enough to absorb all available products. Lubricating oils generally remained steady although some suppliers reported bright stocks and neutrals somewhat "sluggish." Gasoline call was consistently steady all week. Few open spot sales are being made on any of the products as anticipated production is completely budgeted at beginning of each month, leaving little available for open spot market.

Opening of navigation season is eagerly awaited since it will help ease the present "impossible" transportation situation brought on by shortage of tank cars, breakdowns of trucks and shortage of truck parts and drivers.

° ° °

ATLANTIC COAST—Philadelphia is still feeling shortage of light fuel oil, according to many suppliers; slight improvement reported by some New York marketers, but New England territory is still most critical area.

With distillate expected almost exclusively at eastern terminus of "Little Inch" northern suppliers anticipate easier positions with delivery at Bayonne. Quotations at all points unchanged.

° ° °

PENNSYLVANIA — Lower Penna. field refiner entered the gasoline market with quotation of 8c for "Q" gasoline, min. 70 octane and another refiner hiked his quotation 0.25c per gal to 8c, leaving price range unchanged at 7.75-8.45c. Fuel oil market reported very strong as curtailed crude production prevents building up of inventories on heating oils, resulting in refiners operating on daily production. Several refiners reported sales of 200 vis. 25 p.t. neutrals at 31.5c and 32.5c. Price range is still 28-32.5c for 200 and 26-30.5c for 150 vis. 25 p.t.

° ° °

MIDCONTINENT — Gasoline stocks are reported comfortable for present demand but below normal. Farm demand for third grade gasoline is gradually picking up. Warmer weather is expected to ease heavy demand for burning oils and kerosine but refiners continue to report having to delay orders. Railroads are calling for more residual fuel. Bright stock is under heavy call but neutrals are reported more easily available.

Ten cars Grade 26-70 natural gasoline were reported sold at 4.375c f.o.b. Breckenridge, and seven cars at 4.75c f.o.b Group 3.

° ° °

GULF COAST—Contracts for government orders continue to drain products market at Gulf leaving little material for civilian consumption. Practically all cargo sales being made to government.

Only refiner in Texas area quoting 4c on 48-52 Diesel Index in barges withdrew his quotation leaving no price for this product. Same refiner re-entered market with 3.75c on No. 2 fuel oil in tank car and barges; prices range is unaffected. No other changes reported.

CRUDE PRICES

Since changes in crude oil prices are so few, the 2 pages of crude oil price tables hereafter will be printed only when there are sufficient changes in prices to warrant.

In the meantime a record is being kept in the Cleveland office of NPN and OILGRAM from which the publishers will be glad to make proofs, or letters or affidavits as to what the prices are, and without charge to regular subscribers. Changes in crude oil prices will be specially noted in this market section when made.

Crude Price Changes

Continental Oil Co. reported 1c hike in crude oil prices at Rincon and Cameron, Texas, effective Jan. 1, 1944. Schedule begins with $1.21 for below 29 gravity with 2c differential to $1,45 for 40 & above. New posting of $1.30 for West Mermentau, La. crude was also reported. Same company posted new schedule for Abbeville, Tepetate, Lake Arthur and North Tepetate, La. crudes, effective Jan. 12. Schedule begins at $0.90 for 20-20.9 gravity, 2c differential to $1.30 for 40 & above.

Stanolind Oil & Gas Co. posted new schedule Feb. 12, to begin with below 21 grav. at 85c with 2c differential to 40 & above grav. at $12.5.

For latest tables of crude prices see NPN Feb. 23, pages 61-62.

Summary of Daily Gasoline Prices (February 28 to March 6)

	Monday Mar. 6	Friday Mar. 3	Thursday Mar. 2	Wednesday Mar. 1	Tuesday Feb. 29
U. S. Motor (ASTM octane)					
76 octane Ethyl:					
Oklahoma	6.75	6.75	6.75	6.75	6.75
Mid-Western (Group 3 basis)	6.75 - 7.25	6.75 - 7.25	6.75 - 7.25	6.75 - 7.25	7
N. Tex. (For shpt. to Tex. & N. M. dest'ns.)	7	7	7	7	7
W. Tex. (For shpt. to Tex. & N. M. dest'ns.)	6.75 - 7 (2)	6.75 - 7 (2)	6.75 - 7 (2)	6.75 - 7 (2)	6.75 - 7 (2)
72 octane:					
Oklahoma	6	6	6	6	6
Mid-Western (Group 3 basis)	6	6	6	6	6
N. Tex. (For shpt. to Tex. & N. M. dest'ns.)	6	6	6	6	6
W. Tex. (For shpt. to Tex. & N. M. dest'ns.)	6	6	6	6	6
63-66 octane:					
Oklahoma	5.625 (2)	5.625 (2)	5.625 (2)	5.625 (2)	5 625 (2)
Mid-Western (Group 3 basis)	5.6 - 5.625	5.6 - 5.625	5.6 - 5.625	5.6 - 5.625	5.6 - 5.625
N. Tex. (For shpt. to Tex. & N. M. dest'ns.)	5.625 (1)	5.625 (2)	5.625 (2)	5.625 (2)	5.625 (2)
W. Tex. (For shpt. to Tex. & N. M. dest'ns.)	5.75 (1)	5.75 (1)	5.75 (1)	5.75 (1)	5.75 (1)
60 octane & below:					
Oklahoma	5.25	5.25	5.25	5.25	5.25
Mid-Western (Group 3 basis)	5.2 - 5.25	5.2 - 5.25	5.2 - 5.25	5.2 - 5.25	5.2 - 5.25
N. Tex. (For shpt. to Tex. & N. M. dest'ns.)	5.2 - 5.25	5.2 - 5.25	5.2 - 5.25	5.2 - 5.25	2 - 5.25
W. Tex. (For shpt. to Tex. & N. M. dest'ns.)	5.25	5.25	5.25	5.25	5.25
Motor Gasoline, 72 octane (ASTM)					
New York harbor	9.2 - 9.4	9.2 - 9.4	9.2 - 9.4	9.2 - 9.4	9.2 - 9.4
New York harbor, barges	9.1 - 9.3	9.1 - 9.3	9.1 - 9.3	9.1 - 9.3	9. - 9.3
Philadelphia district	9.2	9.2	9.2	9.2	9.2
Baltimore district	8.95	8.95	8.95	8.95	8 95
Motor Gasoline:					
Western Penna. Bradford-Warren:					
"Q" Gasoline, Min. 70 Oct. (ASTM)	7.75 - 8.95	7.75 - 8.95	7.75 - 8.95	7.75 - 8.95	7.75 - 8.95
Western Penna. Other Districts:					
"Q" Gasoline, Min. 70 Oct. (ASTM)	7.75 - 8.45	7.75 - 8.45	7.75 - 8.45	7.5 - 8.45	7.5 - 8.45

OIL PRICE SECTION

★

At Refineries and Terminals and by Tank Wagon

Prices herewith are reproduced from Platt's *OILGRAM* Daily Oil Price Service, associated with National Petroleum News, whose representatives in all *NPN-OILGRAM* offices devote their time exclusively to reporting oil industry prices everywhere.

Prices shown are actual sales prices, or quotations meaning sellers' general offers or posted prices; for current sales and shipment; for the business day or period stated; except Tank Wagon prices, prices are for bulk lots such as tank car and motor transport; barge or tanker cargo lot prices are identified; FOB refineries or terminals; in cents per gal. except where shown in bbls. of 42 gals.; ex all fees and taxes; for crude oil and its products lawfully produced and transported; reported as received by *OILGRAM* and National Petroleum News but not guaranteed; for subscribers' private use only and not for resale or distribution or publication. For further details of price conditions apply to any *NPN-OILGRAM* office or see back of any *OILGRAM* Price Service invoice.

For complete price service delivered daily from nearest *OILGRAM* publishing office, New York, Cleveland and Tulsa, Okla. address Platt's *OILGRAM*, 1213 W. 3rd St., Cleveland (13), Ohio. Annual subscription rate payable in advance $100 a year via train mail and $125 per year via air mail.

Refinery Prices

Gasoline —U. S. Motor (A S T M) except where otherwise specified

Prices in Effect	Mar. 6	Feb. 28
OKLAHOMA		
76 oct. Ethyl...	6.75	6.75
72 oct.....	6	6
63-66 oct.....	5.625 (2)	5.625 (2)
60 oct. & below..	5.25	5.25
60-62, 400 e.p...	5.25 (1)	5.25 (1)
MID-WESTERN (Group 3 basis)		
76 oct. Ethyl...	6.75 – 7.25	6.75 – 7.25
72 oct.....	6	6
63-66 oct.....	5.6 – 5.625	5.6 – 5.625
60 oct. & below..	5.2 – 5.25	5.2 – 5.25
N. TEX. (For shpt. to Tex. & N. M. dest'ns.)		
76 oct. Ethyl...	7	7
72 oct.....	6	6
63-66 oct.....	5.625 (1)	5.625 (1)
60 oct. & below..	5.2 – 5.25	5.2 – 5.25
60-62, 400 e.p...	5.375 (1)	5.375 (1)
W. TEX. (For shpt. to Tex. & N. M. dest'ns.)		
76 oct. Ethyl...	6.75 – 7 (2)	6.75 – 7 (2)
72 oct.....	6	6
63-66 oct.....	5.75 (1)	5.75 (1)
60 oct. & below..	5.25	5.25
CENT. W. TEX. (Prices to truck transports)		
76 oct.....	7 (2)	7 (2)
72 oct.....	6 (2)	6 (2)
67-69 oct.....	....	....
62 oct. & below..	5.25 (2)	5.25 (2)
AMARILLO, TEX. (For shpt. to W. Okla. & Tex. differential territory.)		
60 oct. & below.	No Price	No Price
60-62, 400 e.p...	No Price	No Price
KANSAS (For Kansas destinations only)		
76 oct. Ethyl...	7.25-7.5 (2)	7.25-7.5 (2)
72 oct.....	6.25 – 6.3	6.25 – 6.3
63-66 oct.....	5.9 (2)	5.9 (2)
60 oct. & below.	5.5	5.5
ARK. (For shipment to Ark. & La.)		
76 oct. Ethyl...	7 (1)	7 (1)
72 oct., leaded..	6 (1)	6 (1)
70-72 oct. "	5.875 (1)	5.875 (1)
62 oct. "	.....	.....
60 oct. & below, leaded.....	5.25 (1)	5.25 (1)
WESTERN PENNA. (Motor gasoline)		
Bradford-Warren: "Q" Gasoline, Min. 70 Oct. (ASTM)	7.75 – 8.95	7.75 – 8.95
Other districts: "Q" Gasoline, Min. 70 Oct. (ASTM)	7.75 – 8.45	7.75 – 8.45
CENTRAL MICHIGAN (FOB Central Mich. refinery group basis for shpt. within Mich.; shpts. may originate at plants outside Central group.) U.S. Motor: (Oct. ASTM):		
72 oct.....	8 – 8.5	8 – 8.5
67-69 oct.....	....	....
Str. run gasoline, excluding Detroit shpt.....	6	6
OHIO (S. O. Ohio quotations for statewide delivery and subject to exceptions for local price disturbances).		
72 oct.....	8.375	8.375
CALIFORNIA U.S. Motor:		
76 oct. (Ethyl)....	7.5 – 8.75	7.5 – 8.75
70-72 oct. (regular)	6.5 – 7.75	6.5 – 7.75
65 oct. & below (3rd grade).....	6.5 – 6.75	6.5 – 6.75

Kerosine, & Gas Fuel Oils

Prices in Effect	Mar. 6	Feb. 28
OKLAHOMA		
41-43 grav. w.w...	4.375	4.375
42-44 grav. w.w...	4.5	4.5
Range Oil.....	4	4
No. 1 P.W.....	3.875	3.875
No. 1 straw.....	....	....
No. 2 straw.....	3.625	3.625
No. 3 fuel.....	3.5 (2)	3.5 (2)
U. G. I. Gas Oil...	....	....
No. 6 fuel.....	....	....
14-16 fuel.....	$0.97 (2)	$0.97 (2)
MID-WESTERN (Group 3 basis)		
41-43 grav. w.w...	4.375	4.375
42-44 grav. w.w...	4.5	4.5
Range Oil.....	4 –4.1(2)	4 – 4.1
No. 1 p.w.....	3.875	3.875
No. 2 straw.....	3.625	3.625
No. 3.....	.....	3.5 (1)
No. 5.....	.....	$0.85 (1)
No. 6.....	$0.80 (1)	$0.80 (2)
N. TEX. (For shpt. to Tex. & N. M. dest'ns.)		
41-43 grav. w.w...	4.375	4.375
42-44 grav. w.w...	4.5 (1)	4.5 (1)
No. 1 P.W.....	3.875 (1)	3.875 (1)
AMARILLO, TEX. (For shpt. to W. Okla. & Tex. differential territory.)		
42-44 grav. w.w...	4.5 (1)	4.5 (1)
No. 1 straw.....	No Price	No Price
KANSAS (For Kansas destinations only).		
41-43 grav. w.w...	No Price	No Price
42-44 grav. w.w...	4.7 – 4.75	4.7 – 4.75
No. 1 p.w.....	4.1	4.1
No. 6 fuel.....	$0.85	$0.85
ARK. (For shipment to Ark. and La.)		
41-43 grav. w.w...	....	....
42-44 w.w. kero...	4.5 (1)	4.5 (1)
No. 1.....	4 (1)	4 (1)
No. 2.....	3.625 (1)	3.625 (1)
No. 3 fuel.....	3.5 (1)	3.5 (1)
Tractor fuel, for shpt. to Ark. points only.....	5.125 (1)	5.125 (1)
Diesel fuel 52 & below.....	4 (1)	4 (1)
Diesel fuel 58 & above.....	4.25 (1)	4.25 (1)
WESTERN PENNA.		
Bradford-Warren:		
45 grav. w.w.....	6.55 – 8.05	6.55 – 8.05
46 grav. w.w.....	6.675 (1)	6.675 (1)
No. 1 fuel.....	6.875– 8.05	6.875–8.05
No. 2 "	6.75 –7.625(2)	6.75 –7.625(2)
No. 3 "	6.75 –7.75 (2)	6.75 –7.75 (2)
36-40 gravity....	6.625–6.75 (2)	6.625–6.75 (2)
Other districts:		
45 grav. w.w.....	7.25 – 7.925	7.25 – 7.925
46 grav. w.w.....	7.25 – 7.625	7.25 – 7.625
47 grav. w.w.....	7.375– 7.875	7.375– 7.875
No. 1 fuel.....	6.875– 7.375	6.875– 7.375
No. 2 "	6.75 – 7.375	6.75 – 7.375
No. 3 "	6.75 – 7.375	6.75 – 7.375
36-40 grav. Pittsburgh dist. prices excluded.....	6.625– 7.375	6.625– 7.375
CENTRAL MICHIGAN (FOB Central Mich. refinery group basis for shpt. within Mich.; shpts. may originate at plants outside Central group.)		
47-49 gravity w.w.	5.8 – 6	5.8 – 6
P.W. Distillate...	5.5	5.5
No. 3 gas oil, Straw	5	5
U.G.I. gas oil.....	4.5 (2)	4.5 (2)
Fuel Oils (*Vis. at* 100).		
300-500 Vis....	....	....
100-300 Vis....	4.5	4.5
OHIO (S. O. quotations for statewide delivery)		
Kerosine.....	7	7
CALIFORNIA		
40-43 grav. w.w...	5 – 7	5 – 7
San Joaquin Valley:		
Heavy fuel.....	$1.10 (2)	$1.10 (2)
Light fuel.....	$1.15 (2)	$1.20 (2)
Diesel fuel.....	4 (2)	4 (2)
Stove dist.....	5 (2)	5 (2)
Los Angeles:		
Heavy fuel.....	$1.10 (2)	$1.10 (2)
Light fuel.....	$1.15–$1.20 (2)	$1.20 (2)
Diesel fuel.....	4 (2)	4 (2)
Stove dist.....	5	5
San Francisco:		
Heavy fuel.....	$1.15 (1)	$1.15 (1)
Light fuel.....	$1.25 (1)	$1.25 (1)
Diesel fuel.....	4.5 (1)	4.5 (1)
Stove dist.....	5.5 (1)	5.5 (1)

NOTE: All above heavy fuels meet Pacific specification 400; light fuel, spec. 300; Diesel fuels, spec. 200; and stove distillate, spec. 100.

Lubricating Oils

Prices in Effect	Mar. 6	Feb. 28
WESTERN PENNA.		
Prices are for sales made, or offers reliably reported, to jobbers & compounders only.		
Viscous Neutrals—*No. 3 col. Vis. at* 70°*F.*		
200 Vis. (180 at 100°) 420-425 fl.		
0 p.t.....	35 (1)	35 (1)
10 p.t.....	34 (1)	34 (1)
15 p.t.....	33 (1)	33 (1)
25 p.t.....	28–32.5	28–32.5
150 Vis. (143 at 100°) 400-405 fl.		
0 p.t.....	33 (1)	33 (1)
10 p.t.....	32 (1)	32 (1)
15 p.t.....	31 (1)	31 (1)
25 p.t.....	26–30.5	26–30.5
Cylinder Stocks		
Brt. stk., 145-155 *vis. at* 210°, 540-550 fl., *No. 8 col.*		
10 p.t.....	30.5 (1)	30.5 (1)
15 p.t.....	29.5 (1)	29.5 (1)
25 p.t.....	25	25
600 S.R. filterable.	15	15
650 S.R.....	15.5	15.5
600 fl.....	16	16
630 fl.....	17	17
MID-CONTINENT (F. o. b. Tulsa)		
Neutral Oils (*Vis. at* 100° *F. 0 to 10 P.P.*)		
Pale Oils:		
Vis. Color		
60-85—No. 2....	8	8
86-110—No. 2...	8.5	8.5
150—No. 3.....	14.5	14.5
180—No. 3.....	15	15
200—No. 3.....	15	15
250—No. 3.....	16–16.5	16–16.5
280—No. 3.....	17	17
300—No. 3.....	18	18
Red Oils:		
180—No. 5.....	15 (1)	15 (1)
200—No. 5.....	15 (1)	15 (1)
280—No. 5.....	No Price	No Price
300—No. 5.....	17.5 (2)	17.5 (2)

Note: Viscous Neutrals, 15-25 p.p. generally are quoted 0.5c under 0-10 p.p. oils. Non-viscous oils, 15-25 p.p.; generally are quoted 0.25c under 0-10 p.p. oils.

NOTE—Discounts of 1c for contracts and 1c and 2c and sometimes more off in addition, to "meet competition" are generally being allowed from these posted prices on "conventional" oils.

Bright Stock—*Vis. at* 210°		
200 Vis. D.....	27 (1)	27 (1)
150-160 Vis. D:		
0 to 10 p.p.....	23	23
10 to 25 p.p.....	22.5–23	22.5–23
25 to 40 p.p.....	23 (1)	23 (1)
150-160 Vis. E....	22 (1)	22 (1)
120 Vis. D:		
0 to 10 p.p.....	22 (2)	22 (2)
600 S.R. Dark Green.....	8.5 (1)	8.5 (1)
600 S.R. Olive Green.....	10–11 (2)	10–11 (2)
631 S.R.....	....	....
Black Oil.....	5.5 (1)	5.5 (1)
SOUTH TEXAS Neutral Oils		
Pale Oils (*Vis. at* 100°*F.*)		
Vis. Color		
100 No. 1½-2½.	6.5	6.5
200 No. 2-3.....	8.75	8.75
300 No. 2-3.....	9.25	9.25
500 No. 2½-3½..	10	10
750 No. 3-4.....	10.25	10.25
1200 No. 3-4.....	10.375	10.375
2000 No. 4.....	10.5	10.5

(Continued on next page)

NOTE—Parenthetical figures after prices indicate number of companies quoting when less than three companies are quoting.

NOTICE—Owing to great demand, refiners generally limit quotations to regular customers and refuse bids, though higher, from others. Refiners' prices and sales shown) bids reported in market leads.

Refinery Prices (Continued)

Prices in Effect	Mar. 6	Feb. 28
Red Oils:		
100 No. 5-6	6.5 (2)	6.5 (2)
200 No. 5-6	8 75	8.75
800 No. 5-6	9.25	9.25
500 No. 5-6	10	10
750 No. 5-6	10.25	10.25
1200 No. 5-6	10 375	10.375
2000 No. 5-6	10.5	10.5

CHICAGO (From Mid-Continent p.l. crude.)
Neutral oils *vis. at* 100° *F. to* 10 *p. p.*

Pale Oils Vis. Color		
60-85—No. 2	9.5 (1)	9.5 (1)
86-110—No. 2	10 (1)	10 (1)
150—No. 3	15.5 (1)	15.5 (1)
180—No. 3	16 (1)	16 (1)
200—No. 3	16 (1)	16 (1)
250—No. 3	17 (1)	17 (1)
Red Oils:		
180—No. 5	16 (1)	16 (1)
200—No. 5	16 (1)	16 (1)
250—No. 5	17 (1)	17 (1)
280—No. 5	18 (1)	18 (1)
800—No. 5	18.5 (1)	18.5 (1)

Note: Viscous oils, 15 to 30 p.p. are quoted 0.5c lower: 60-85 and 86-110 No. 2 non-viscous oils, 15 to 30 p.p., 0.25c lower.

Unfiltered Steam Refined: (*Viscosity at* 210°)

140	11.5 (1)	11.5 (1)
160	12.5 (1)	12.5 (1)
200	13.5 (1)	13.5 (1)

Bright stocks, 160 *vis. at* 210 *No.* 8 *color:*

0 to 10 p.p.	24 (1)	24 (1)
15 to 25 p.p.	23 5 (1)	23.5 (1)
30 to 40 p.p.	21.5 (1)	21.5 (1)
E filtered Cyl. Stock	15.5 (1)	15.5 (1)

Note: To obtain prices delivered in Chicago, add 0.25c per gal.

Natural Gasoline

(Group 3 & Breckenridge prices are to blenders on freight basis shown below. Shipments may originate in any Mid-Continent manufacturing district.)

FOB GROUP 3

Grade 26-70	4.75 (Sales)	4.75 (Quote)

FOB BRECKENRIDGE

Grade 26-70	4.375 (Quote)	4.375 (Quote)

CALIFORNIA (FOB plants in Los Angeles basin)

21 pound vapor pressure for blending	4.75- 5.375	4.75 - 5.375

Naphtha and Solvent

(*FOB Group* 3)

Stoddard solvent	6.625	6.625
Cleaners' naphtha	7.125	7.125
V.M.&P. naphtha	7.1 - 7.125	7.1 - 7.125
Mineral spirits	6.1 - 6.125	6.1 - 6.125
Rubber solvent	7.1 - 7.125	7.1 - 7.125
Lacquer diluent	7.375- 8.125	7 375- 8.125
Benzol Diluent	7.875- 8.625	7.875- 8.625

WESTERN PENNA.

Bradford-Warren District:		
Stoddard Solvent	7.5 (1)	7.5 (1)
Other Districts:		
Untreated naphtha	7 - 7.25	7 - 7.25
Stoddard solvent	7.25 - 8	7.25 - 8

OHIO (S. O. quotations for statewide delivery):

V.M.&P. naphtha, D.C. naphtha, Varnolene & Bohio solvent	10	10
Rubber solvent	9	9

Wax

WESTERN PENNA. (Bbls. C.L.)

White Crude Scale:		
122-124 A.m.p.	4.25 (2)	4.25 (2)
124-126 A.m.p.	4.25	4.25

OKLAHOMA (C.L. FOB Refinery)

Semi-refined:		
128 AMP min., white, 50 kilo bags	No Price	No Price
132-134 AMP, bbls.	5.25 (1)	5.25 (1)

CHICAGO (FOB Chicago district refinery of one refiner, in bags, carloads. Carloads, slabs loose 0.4c less. Melting points are EMP (ASTM) methods; add 3° to convert into AMP.)

Fully refined:		
122-124 (bags only)	5.6	5.6
125-127	6	6
127-129	6.25	6.25
130-132	6.55	6.55
132-134	6.8	6.8
135-137	7.55	7.55

Petrolatums

WESTERN PENNA. (Bbls., carloads; tank cars, 0.5c per lb. less.)

Snow White	6.125- 7.25	6.125- 7.25
Lily White	5.375- 6.25	5.375- 6.25
Cream White	4.375- 5.5	4.375- 5.5
Light Amber	3.375- 4	3.375- 4
Amber	3.125- 3.75	3.125- 3.75
Red	3 - 3.5	3 - 3.5

Tank Wagon Prices

Commercial or consumer tank car, tank wagon, dealer, and service station prices for gasoline **do not include taxes;** *they do, however, include inspection fees as shown in general footnote. Gasoline taxes, shown in separate column, include* 1.5c *federal, and state taxes; also city and county taxes as indicated in footnotes. Kerosine tank wagon prices also do not include taxes: kerosine taxes where levied are indicated in footnotes. Dealer discounts are shown in footnotes. Theseprices in effect Mar.* 6, 1944 *as posted by principal marketing companies at their headquarters offices, but subject to later correction.*

S. O. N. J. — **Esso** (*Regular Grade*)

	Consumer Tank Wagon	Dealer T.W.	Gasoline Taxes	Kerosine T.W.
*Atlantic City, N. J.	10.2	10.7	4.5	10
*Newark, N. J.	10.2	10.7	4.5	10
Annapolis, Md.	10.55	11.05	5.5	....
Baltimore, Md.	9.95	10.45	5.5	10.8
Cumberland, Md.	11.35	11.85	5.5	12.3
Washington, D. C.	10.2	10.7	4.5	11.3
Danville, Va.	11.65	12.15	6.5	12.55
Norfolk, Va.	10.45	10.95	6.5	12.3
Petersburg, Va.	10.75	11.25	6.5	13.3
Richmond, Va.	10.75	11.25	6.5	13.3
Roanoke, Va.	11.95	12.45	6.5	12.8
Charleston, W. Va.	12.25	12.75	6.5	13.6
Parkersburg, W. Va.	11.55	12.05	6.5	13.3
Wheeling, W. Va.	11.55	12.05	6.5	13.9
Charlotte, N. C.	12.1	12.6	7.5	11.6
Hickory, N. C.	12.65	13.15	7.5	12.6
Mt. Airy, N. C.	12.5	13.0	7.5	11.8
Raleigh, N. C.	11.85	12.35	7.5	12.6
Salisbury, N. C.	12.15	12.65	7.5	13.0
Charleston, S. C.	10 95	11.45	7.5	....
Columbia, S. C.	11.8	12.3	7.5	....
Spartanburg, S. C.	12.5	13.0	7.5	....

	Mineral Spirits T.W.	V.M.&P. T.W.
Newark, N. J.	13	14.5
Baltimore, Md.	15.5	....
Washington, D. C.	15.5	....

Fuel Oils—T.W.	No. 1	No. 2	No. 3
Atlantic City, N. J.	10	9	9
Newark	10	9	9
Annapolis, Md.	...	...	...
Baltimore	9.8	9	9
Washington, D. C.	10.3	9.4	9.4
Norfolk, Va	10	8.8	8.8
Petersburg	10.3	9	...
Richmond	10.3	9	9
Charlotte, N. C.	10.6	10.4	...
Hickory, N. C.	...	10	...
Raleigh	11.6	10.1	...
Charleston, S. C.	....	9	...
Columbia	....	10	...
Spartanburg	....	10.8	...

*Effective Aug. 5, '42 minimum retail resale price of 14.2c posted thru New Jersey. Discounts;

Esso gasoline—to undivided dealers, 0.5c off dealer t.w.

Kerosine—1c off t.w. price for 25 gals. or more, under contract thru territory (Baltimore city contract not necessary) except no discount in state of New Jersey.

Naphthas—To buyers taking following quantities at one time: Newark, 2c per gal. on 200 gals. or more, less than 200 gals, 0.5c higher price; Baltimore, 2c off on 25 to 100 gals. and 3c on over 100 gals.; Washington, 2c off to contract buyers.

(N.B. Prices are Continental's "structural" prices. Prices do not reflect temporary reductions made to meet local competition.)

Notice

These prices include inspection fees on both gasoline and kerosine unless otherwise specified per gallon as follows:

Ala. 1/40c on gasoline, 1/2c on kerosine; Ark. 1/20c; Fl. 1/8c; Ill. 3/100c; Ind. 1/5c in lots of 25 bbls. or less. 2/25c in lots of more than 25 bbls.; Kans. 1/50c; La. 1/32c; Minn. 7/200c; Mis. 1/50c; Neb. 3/100c; Nev. gasoline 1/20c; N. C. 1/4c; N. Da. 1/20c; Okla. 2/25c; S. Car. 1/8c; S. Da. 1/20c; Tenn. 2/5c; and Wisc. 3/100c.

Kerosine inspection fees only: Iowa 3/50c; Mich. 1/5c per gal.

CONT'L OIL

	Conoco Bronz-z-z (*Reg.*) †Tank	Demand (*3rd Grade*) Wagon	Gasoline Taxes	Kerosine T.W.
Denver, Col.	11	10	5.5	11
Grand Junc., Col.	12.5	11.5	5.5	12.5
Pueblo, Col.	10.5	9.5	5.5	10.5
Casper, Wyo.	11.5	10.5	5.5	12
Cheyenne, Wyo.	11	10	5.5	11.5
Billings, Mont.	12.5	11.5	6.5	12 5
Butte, Mont.	13 5	12.5	6.5	13 5
Great Falls, Mont.	12 5	11.5	6.5	12.5
Helena, Mont.	13	12	6.5	13
Salt Lake City, Utah	13.5	12.5	5.5	14.5
Boise, Ida.	14.1	13.1	6.5	16.5
Twin Falls, Ida.	15.6	14.6	6.5	17
Albuquerque, N. M.	10	9	*7	9.5
Roswell, N. M.	9.5	8.5	*7	9
Santa Fe, N. M.	10.5	9.5	*7.5	10
Ft. Smith, Ark.	9.5	9.25	*7	9.5
Texarkana, Ark.	9	8	*5.5	9
Muskogee, Okla.	9.5	8.5	7	8.5
Oklahoma City, Okla.	9.5	8.5	7	8.5
Tulsa, Okla.	9.5	8.5	7	8.5

*Taxes: In gasoline tax column are included these city taxes—Albuquerque, & Roswell, 0.5c, Santa Fe, 1c. Texas 4c state tax applies within city limits of Texarkana, Ark.; Okla. 5.5c state applies within city limits of Ft. Smith, Ark.

†To consumers & Dealers.

S. O. NEB. — (*Regular Grade*)

	T.W.	Dealer	Gasoline Taxes	Kerosine T.W.
Omaha	11.4	9.6	6.5	10.1
McCook	12.0	10.1	6.5	10.5
Norfolk	11.9	10.4	6.5	10.6
North Platte	12.2	10.6	6.5	11
Scottsbluff	12.9	10.2	6.5	10.5

Standard Gasoline (*Regular Grade*)
Flight Gasoline (*Third Grade*)

S. O. CAL.

	Standard Posted Net Tank Truck	Standard Posted Retail	Flight Posted Net Tank Truck	Flight Posted Retail	Gasoline Taxes
San Francisco, Cal.	10	14	9	12	4.5
Los Angeles, Cal.	9.5	13.5	8.5	11.5	4.5
Fresno, Cal.	11	15	10	13	4 5
Phoenix, Ariz.	12	16	10	13	6.5
Reno, Nev.	12	16	11	14	5.5
Portland, Ore.	10.5	14.5	9.5	12.5	6.5
Seattle, Wash.	10.5	14.5	9.5	12.5	6.5
Spokane, Wash.	12.5	16.5	11.5	14.5	6.5
Tacoma, Wash.	10.5	14.5	9.5	12.5	6.5

Std. Aviation 73

	Posted Net Tank Truck	Gasoline Taxes	Kerosine Tank Truck
San Francisco, Cal.	12.5	4.5	11.5
Los Angeles, Cal.	12	4.5	10
Fresno, Cal.	13.5	4.5	12.5
Phoenix, Ariz.	14.5	6.5	12.5
Reno, Nev.	14.5	5.5	13.5
Portland, Ore.	13	6.5	13.8
Seattle, Wash.	13	6.5	13.8
Spokane, Wash.	16	6.5	16.8
Tacoma, Wash.	13	6.5	13.8

Resale & Commercial: T.C. deliveries 0.25c per gal. off posted net tank truck.

Commercial: Retail deliveries, and/or tank truck deliveries of less than 40 gals., 4c per gal. above posted net tank truck price for Standard Aviation and Standard Gasoline, and 3c per gal. above posted net tank truck for Flight Gasoline, except single deliveries of less than 40 gals. to Marine trade only, which are billed at posted net tank truck price.

TEXAS CO.

	Gasoline—Dealer T.W. Fire-Chief (*Regular*)	Indian (*3rd Grade*)	Gasoline Taxes
Dallas, Tex.	7.5	6.5	5.5
Ft. Worth, Tex.	7.5	6.5	5.5
Wichita Falls, Tex.	8.5	7.5	5.5
Amarillo, Tex.	8.5	7.5	5.5
Tyler, Tex.	8.5	7.5	5.5
El Paso, Tex.	11	10.5	5.5
San Angelo, Tex.	8.5	7.5	5.5
Waco, Tex.	8.5*	7*	5.5
Austin, Tex.	8.5	7.5	5.5
Houston, Tex.	8.5	7.5	5.5
San Antonio, Tex.	8.5	7.5	5.5
Port Arthur, Tex.	8.5	7.5	5.5

*Less 1c temporary allowance to all dealers.

(Continued on next page)

Tank Wagon Prices—Continued

S. O. IND.

Red Crown (*Regular Grade*)
Blue Crown (*Third Grade*)

Red Dealer Prices	Red Crown Cons. T.W.	Red Crown	Blue Crown	Gaso-line Taxes	Kero-sine T.W.
Chicago, Ill.	11.6	9.6	9.1	4.5	10.6
Decatur, Ill.	11.6	9.6	8.7	4.5	10.3
Joliet, Ill.	11.9	10.3	9.2	4.5	10.6
Peoria, Ill.	11.7	9.9	9.7	4.5	10.4
Indianapolis, Ind.	11.6	10.1	9.6	5.5	10.1
Evansville, Ind.	11.4	9.9	8.6	5.5	9.9
South Bend, Ind.	12	10.5	10	5.5	10.5
Detroit, Mich.	11.4	9.9	9.4	4.5	10
Grand Rapids, Mich.	11.4	9.9	9.4	4.5	9.9
Saginaw, Mich.	11.4	9.9	9.4	4.5	9.9
Green Bay, Wis.	12.2	10.7	10.2	5.5	10.9
Milwaukee, Wis.	12.1	10.6	10.1	5.5	10.8
La Crosse, Wis.	11.9	10.4	9.9	5.5	10.6
Minneapolis - St. Paul.	11.9	10.4	9.9	5.5	10.6
Duluth, Minn.	12.2	10.7	10.2	5.5	10.9
Mankato, Minn.	11.9	10.4	9.9	5.5	10.6
Des Moines, Ia.	11.4	9.9	9.4	4.5	*10.1
Mason City, Ia.	11.7	10.2	9.7	4.5	*10.4
St. Louis, Mo.	11.0	9.5	9.3	*4.5	10.1
Kansas City, Mo.	11.0	9.5	8.6	*4.5	9.7
St. Joseph, Mo.	11.2	9.7	9.2	*4.5	9.9
Fargo, N. D.	12.9	11.4	10.9	5.5	11.6
Huron, S. D.	12.3	10.8	10.3	5.5	11
Wichita, Kans.	10.3	8.8	7.2	4.5	9.0

Stanavo Aviation 73 Octane
Withdrawn Jan. 1, 1944.

	Oleum Spirits	V.M.&P. Naphtha	Stani-sol	*Taxes
(Prices are base prices before discounts)				
Chicago	13.5	13.8	12.8	4.5
Detroit	15.8	15	16.3	4.5
K. C., Mo.	13.3	14.3	13.8	1.5
St. Louis, Mo.	13.7	14.7	13.2	1.5
Milwaukee	14.4	15.4	14.9	5.5
Minneap'ls	14.2	15.2	13.5	5.5

Fuel Oils T.W.
Chicago

Standard Heater Oil	
1-99 gals.	9.3
100-149 gals.	8.3
150 gals. & over	7.8

Stanolex Furnace Oil	
1-99 gals.	8.8
100-149 gals.	7.8
150-399 gals.	7.8
400 gals. & over	7.3

Stanolex Fuel Oil A	
1-99 gals.	8.3
100-399 gals.	7.3
400-749 gals.	6.3
750 gals. & over	5.55

Stanolex Bunker C Fuel Oil	
1-399 gals.	6.8
400-999 gals.	5.8
1000 gals. & over	4.8

Other Points	Stanolex Furnace Oil
Indianapolis	
1-99 gals.	9.0
100 gals. & over	8.0
Detroit	
1-99 gals.	8.7
100 gals. & over	7.7
Milwaukee	
1-99 gals.	9.0
100 gals. & over	8.0
Minneapolis	
1-99 gals.	9.1
100 gals. & over	8.1
St. Louis	
1-99 gals.	8.4
100 gals. & over	7.4
Kansas City	
1-99 gals.	8.1
100 gals. & over	7.1

*Taxes: In gasoline tax column are included these city taxes—Kansas City, St. Joseph and St. Louis, 1c. Iowa kerosine prices are ex 3c state tax. In naphtha tax column are included 1.5c federal tax and state taxes.

State sales, occupation, consumer and use taxes to be added when applicable.

HUMBLE OIL

Humble Motor Fuel (*Regular Grade*)

	Thriftane Humble *Tank Wagon	Thriftane Re-tail	Thriftane (*Third Grade*) *Tank Wagon	Thriftane Re-tail	Gaso-line Taxes
Dallas, Tex.	7.5	10.5	6.5	10.5	5.5
Ft. Worth, Tex.	6.5	9.5	6	7.5	5.5
Houston, Tex.	8.5	12.5	7.5	10.5	5.5
San Ant., Tex.	8.5	12.5	7.5	10.5	5.5

Kerosine	*Tank Wagon	Retail
Dallas, Tex.	7	10
Ft. Worth, Tex.	7	11
Houston, Tex.	8	11
San Antonio, Tex.	7	10

73 Oct. Aviation Gasoline	Tank Car
FOB Baytown, Tex.	8.5

*To all classes of dealers & consumers.

Fuel oils—Statewide prices are for t.w. & drum deliveries of 50 gals. or more; prices for deliveries of less than 50 gals. are 0.5c higher. Cleveland Division assumed the state-wide fuel oil tank wagon prices on Nos. 1, 2 and 3 fuel oil, effective May 10. However the price of 7.55c per gallon and No. 4 fuel oil (full compartment hose dumps only) will remain as heretofore, in Cleveland Division.

Naphthas—to contract consumers off t.w. prices—Statewide: 300 to 999 gals., 0.5c; 1000 to 2499 gals., 0.75c; 2500 to 4999 gals., 1c; 5000 or more gals., 1.5c. Lucas County: Less than 50 gals., tank wagon price. 50 to 249 gals., 0.5c; 250 to 499 gals., 1c; 500 gals. or over, 1.5c.

S. O. OHIO

*Sohio X-70 Gasoline (*Regular Grade*)

	Consumer T.W.	**Re-sellers	‡S.S.	Gaso-line Taxes	†Kero-sine T.W.
Ohio, Statewide	12	10	13.5	5.5	9.3
Akron	12	9.5	12.5	5.5	9.3
Cincinnati	12	9.5	12.5	5.5	9.3
Cleveland	12	9.5	12.5	5.5	9.3
Columbus	12	9.5	12.5	5.5	9.3
Dayton	12	9.5	12.5	5.5	9.3
Marietta	12	9.5	12.5	5.5	9.3
Portsmouth	12	9.5	12.5	5.5	9.3
Toledo	12	9.5	12.5	5.5	9.3
Youngstown	12	9.5	12.5	5.5	9.3

Aviation Gasoline—Statewide

	Consumer T.W.	Gasoline Taxes
Sohio Aviation Gasoline clear Spec. AN-F-22	14.5	5.5
Esso Ethyl Aviation 73 Oct.	15.5	5.5
Esso Ethyl Aviation 80 Oct.	16.5	5.5
Esso Ethyl Aviation 87 Oct.	17.5	5.5
Esso Ethyl Aviation 91 Oct.	17.5	5.5
Esso Ethyl Aviation 100 Oct.	25.5	5.5

	†Naphtha—T.W. Statewide	Lucas County
S. R. Solvent	13.5	13.5
D. C. Naphtha	14.5	14.25
V.M.&P. Naphtha	14.5	14.25
Varnolene	14.5	14.25
Sohio Solvent	14.5	14.25

Fuel Oils—T.W.	No. 1	No. 2	No. 3	No. 4
Ohio, Statewide	8.3	8.3	7.8	7.55*

*Renown (third-grade) prices are same as X-70 unless otherwise noted.

**Except authorized agents.

†Kerosine prices are ex 1c state tax. Naphtha prices are ex 1.5c federal & 4c state tax.

‡Prices at company-operated stations.

††Statewide prices are subject to exceptions other than those shown.

Discounts:

Esso aviation—on contract to hangar operators and resellers, 2c off consumer t.w.

*For Cleveland area only.

Canada

PRICES OF IMPERIAL OIL, LTD.

Per Imperial Gallon, which is 1.2 U. S. Gallons

IMPERIAL OIL

3-Star Imperial Gasoline (*Regular Grade*)

	†Gasoline T.W.	*Gasoline Taxes	†Kero-sine T.W.
Hamilton, Ont.	17.5	11	18
Toronto, Ont.	17.5	11	18
Brandon, Man.	21	10	23
Winnipeg, Man.	20.5	10	22.5
Regina, Sask.	18	10	20
Saskatoon, Sask.	20.8	10	22.8
Edmonton, Alta.	18.9	10	20.9
Calgary, Alta.	16	10	18
Vancouver, B. C.	15	10	24
Montreal, Que.	17	11	17.5
St. John, N. B.	16.5	13	19
Halifax, N. S.	16.5	13	19

*Includes 3c Federal, and Provincial taxes. To divided & undivided dealers.

ATLANTIC REFINING

Atlantic White Flash (*Regular Grade*)

	Commercial T.W.	Dealer T.W.	Gaso-line Taxes	Kero-sine T.W.
Philadelphia, Pa.	10.2	10.7	5.5	12.25
Pittsburgh	10.7	11.2	5.5	12.6
Allentown	10.7	11.2	5.5	12.6
Erie	10.7	11.2	5.5	12.6
Scranton	10.7	11.2	5.5	12.6
Altoona	10.7	11.2	5.5	12.6
Emporium	10.7	11.2	5.5	12.6
Indiana	10.7	11.2	5.5	12.6
Uniontown	10.7	11.2	5.5	12.6
Harrisburg	10.7	11.2	5.5	12.6
Williamsport	10.7	11.2	5.5	12.6
Dover, Del.	....	11.2	5.5	12.6
Wilmington, Del.	....	10.7	5.5	12.1
Boston, Mass.	....	10.9	5.5	...—
Springfield, Mass.	....	11.8	4.5	...—
Worcester, Mass.	....	11.5	4.5	...—
Fall River, Mass.	....	11	4.5	...—
Hartford, Conn.	....	11.6	4.5	...—
New Haven, Conn.	....	11	4.5	...—
Providence, R. I.	....	11	4.5	...—
Atlantic City, N. J	....	10.7	4.5	10
Camden, N. J.	....	10.7	4.5	10
Trenton, N. J.	....	10.7	4.5	10
Annapolis, Md.	....	11 05	5.5	10.8
Baltimore, Md.	....	10.45	5.5	9.8
Hagerstown, Md.	....	11.55	5.5	10.8
Richmond, Va.	....	11.25	6.5	12.8
Wilmington, N. C.	....	11.55	7.5	11.9
Brunswick, Ga.	....	10.4	7.5	11.1
Jacksonville, Fla.	....	10.4	8.5	12.1

	Mineral Spirits T.W.†	V.M.&P. T.W.†
Philadelphia, Pa.	11	12.5
Lancaster, Pa.	12	13.5
Pittsburgh, Pa.	12.5	13.5

Fuel Oils—T.W.	1	2	3	5	6
Phila., Pa.	10.1	9	9	5.76	5.04*
Allentown, Pa.	10 6	9.3	9.3	....	...—
Wilmington, Del.	10.1	9	9	....	...—
Springfield, Mass.	10.2	9.4	9.4	....	...—
Worcester, Mass.	10.2	9.3	9.3	....	...—
Hartford, Conn.	10.5	9	9	....	...—

‡Does not include 1c Georgia kerosine tax.

†Mineral Spirits prices also apply to Stoddard Solvent; V.M.&P. prices also apply to Light Cleaners Naphtha.

Discounts:

Gasoline—to undivided dealers, 0.5c off dealer t.w., except Georgia & Florida dealer t.w. and undivided dealer t.w. prices are same.

Kerosine—Thru Penna. & Delaware, 2c off t.w. price on t.w. deliveries of 25 gals. or more at one time.

*Residual fuel 13.0-15.9 gravity effective 10/17/43.

S. O. KY.

Crown Gasoline (*Regular*)
Standard (*Third Grade*)

	†Net Crown	Dealer Standard	Gaso-line Taxes	Kero-sine T.W.
Covington, Ky.	9.5	...	6.5	9.3
Lexington, Ky.	10.5	...	6.5	9.3
Louisville, Ky.	10	...	6.5	8.8
Paducah, Ky.	10	...	6.5	8.8
Jackson, Miss.	10	...	7.5	*9
Vicksburg, Miss.	9.5	...	7.5	*8.5
Birmingham, Ala.	10	...	*8.5	9
Mobile, Ala.	9	...	*9.5	9.5
Montgomery, Ala.	10	...	*9.5	10
Atlanta, Ga.	11.4	...	7.5	*12.1
Augusta, Ga.	11.4	...	7.5	*11.6
Macon, Ga.	11.4	...	7.5	12.1
Savannah, Ga.	10.4	...	7.5	11.1
Jacksonville, Fla.	10.4	...	8.5	10.1
Miami, Fla.	10.4	...	8.5	10.1
Pensacola, Fla.	9	8	*9.5	8
Tampa, Fla.	10.4	...	8.5	10.1

*Taxes: In tax column are included these city and county gasoline taxes: Mobile, 2c city; Birmingham, 1c city; Montgomery, 1c city and 1c county; Pensacola, 1c city. Georgia and Montgomery, Ala. have 1c kerosine tax, Mississippi 0.5c, not included in above prices.

†Consumer t.w. prices are same as net dealer prices.

S. O. LA.

Esso Gasoline (*Regular Grade*)

	Consumer Tank Wagon	Dealer T.W.	Gaso-line Taxes	Kero-sine T.W.
New Orleans, La.	8.75	9.25	8.5	*9
Baton Rouge, La.	8.75	9.25	8.5	*9.5
Alexandria, La.	8.75	9.25	8.5	*9.5
Lafayette, La.	9	9.5	8.5	*9
Lake Charles, La.	9	9.5	8.5	*11
Shreveport, La.	8.5	9	8.5	*8
Knoxville, Tenn.	10.5	11	8.5	12.5
Memphis, Tenn.	8.90	9.40	8.5	10.5
Chattanooga, Tenn.	10.5	11	8.5	11
Nashville, Tenn.	10.5	11	8.5	10
Bristol, Tenn.	10.95	11.45	8.5	13.1
Little, Rock, Ark.	9.5	10	8	10

*Louisiana kerosine prices are ex 1c state tax.

Discounts:

Esso Gasoline—To undivided dealers, 0.5c off dealer t.w.

(Continued on next page)

Seaboard Export Coastwise Prices

Atlantic Coast

(Prices are of refiners, FOB their refineries & their tanker terminals, & of tanker terminal operators FOB their terminals)—Prices in Effect Mar. 6

MOTOR GASOLINE

District	72 Oct. (ASTM)	68-70 Oct. (ASTM)	KEROSINE and/or NO. 1 FUEL
N. Y. Harb.	9.2 - 9.4	9.2 (1)	7.1
N. Y. Harb., barges	9.1 - 9.3	9.1 (1)	7
Albany	9.3 - 9.5	....	7.3
Philadelphia	9.2	....	7.2
Baltimore	8.95	8.85 (1)	7.2
Norfolk	8.7 - 8.95	8.5 (1)	7.1
Wilmington, N. C.	8.7 - 8.75	8.5 (1)	7.05
Charleston	8.7 - 8.8	8.1 (1)	7.2
Savannah	8.25 - 8.4	....	7.05
Jacksonville	8.27 - 8.4	....	7.05 (2)
Miami	8.27 (1)	....	7.05 (2)
Tampa	8.27 - 8.4	8.275 (1)	7.05
Pensacola	7 - 7.2 (1)	....	4.8 (1)
Mobile	7 - 7.2	....	4.75 (2)
New Orleans	6.125- 6.75	....	4.25 - 4.75
Portland	9.5 - 9.65	....	7.3
Boston	9.4 - 9.7	9.7 (1)	7.2
Providence	9.4 - 9.7	....	7.2

FUEL OILS

District	No. 2	No. 3	No. 5	No. 6
N. Y. Harb.	6.7	6.7	$1.95-$2.01 (a)	$1.65 -$2.07
N. Y. Harb., barges	6.6	6.6	....	....
Albany	6.8	6.8 (2)	....	$1.85-$2.27 (1)
Philadelphia	6.7	6.7	$1.98	$1.65 -$2.07
Baltimore	6.7	6.7	....	$1.65 -$2.07
Norfolk	6.7	6.7 (1)	....	$1.65-$2.07 (2)
Wilmington, N. C.	6.7	....	....	....
Charleston	6.7 (2)	....	....	$1.60-$2.02 (2)
Savannah	....	....	....	$1.60-$2.02 (1)
Jacksonville	6.25	....	....	$1.60-$2.02 (1)
Miami	....	....	....	....
Tampa	6.25 (2)	....	....	$1.50-$1.92 (2)
Pensacola	....	....	....	....
Mobile	....	....	....	....
New Orleans	3.75 (2)	....	$1.27 (1)	$0.85-$1.27 (2)
Portland	6.8	6.8 (2)	....	$1.65-$2.07 (1)
Boston	6.7	6.7 (2)	$1.95-$2.07 (1)	$1.65 -$2.07
Providence	6.7	6.7 (2)	$1.90 (1)	$1.65 -$2.07

(a) This price is for a straight-run low pour test No. 5 fuel.

Pacific Export

In Ship's Bunkers, or deep tank lots:

Prices in Effect	Mar. 6	Feb. 28
Diesel Fuel, Pac. Spec. 200	$1.45	$1 45
Grade C fuel, Pac. Spec. 400	$1.10	$1.10

Tank Wagon Prices (Continued)

SOCONY VACUUM

	Socony (Regular Grade) Com. Cons. T.W.	Mobilgas Indiv. Dlr. T.W.	Gasoline Taxes
New York City			
Manhattan & Bronx	10.1	10.6	*5.5
Kings & Queens	10.1	10.6	*5.5
Richmond	9.7	10.2	*5.5
Albany, N. Y.	9.9	10.4	5.5
Binghamton, N. Y.	11	11.5	5.5
Buffalo	10.2	10.7	5.5
Jamestown, N. Y.	10.4	10.9	5.5
Mt. Vernon, N. Y.	10.1	10.6	5.5
Plattsburg, N. Y.	11	11.5	5.5
Rochester, N. Y.	10.8	11.3	5.5
Syracuse, N. Y.	10.5	11	4.5
Bridgeport, Conn.	10	10.5	4.5
Danbury, Conn.	10.5	11	4.5
Hartford, Conn.	10.6	11.1	4.5
New Haven, Conn.	10	10.5	4.5
Bangor, Me.	10.7	11.2	5.5
Portland, Me.	10.3	10.8	5.5
Boston, Mass.	9.9	10.4	4.5
Concord, N. H.	11.4	11.9	5.5
Lancaster, N. H.	12	12 5	5.5
Manchester, N. H.	11.3	11.8	5.5
Providence, R. I.	10	10.5	4.5
Burlington, Vt.	10.9	11.4	5.5
Rutland, Vt.	11	11.5	5.5

	Mineral Spirits T.W.	V.M.&P. T.W.
Buffalo, N. Y.	12.4	13.6
New York City	11	12
Rochester, N. Y.	13.2	14.4
Syracuse, N. Y.	14	....
Boston, Mass.	12	13
Bridgeport, Conn.	†16.3	†17.3
Hartford, Conn.	†16.3	†17.3
Providence, R. I.	13	14

	Kerosine Yard	Kerosine T.W.	Mobilfuel Diesel T.C.	Mobilfuel Diesel T.W.	Mobilheat Fuel Yard	Mobilheat Fuel T.W.
New York:						
Manhat'n & Bronx	7.5	10.3	...	9.3	7.1	9
Kings & Queens	7.5	10.3	...	9.3	7.1	9
Richmond	7.5	10 3	...	...	7.1	9.0
Albany	7.5	9.8	7	9.3	7	9
Binghamton	8.9	11.2	...	10.7	8.4	10.2
Buffalo	8.6	10.9	8	10.3	8.2	10
Jamestown	8.7	11	...	10.6	8.3	10
Mt. Vernon	7.6	10.3	...	9.4	7.2	9
Plattsburg	8.1	10.4	...	9.9	7.6	9.4
Rochester	8.7	11	7.9	10.2	7.9	9.7
Syracuse	8.5	10.8	7.8	10.1	7.8	9.6
Conn.:						
Bridgeport	7.8	10.3	...	....	7.2	8.8
Danbury	8.2	10.8	...	....	7.5	8.8
Hartford	8 0	10.5	...	9.5	7.2	9
New Haven	7.8	10.3	...	9.3	7	8.9
Maine:						
Bangor	7.9	10.2	7.4	9.7	7 4	9.1
Portland	7.5	10.2	7	9.3	7	9
Mass.:						
Boston	7.8	10.6	6.9	9.2	7.1	9
N. H.:						
Concord	8.4	10.7	...	....	8.2	10
Lancaster	9.5	11.8	...	....	9.2	11
Manchester	8.5	11.1	...	....	7.9	9.7
R. I.:						
Providence	7.6	9.9	6.9	9.2	7.1	8.9
Vermont:						
Burlington	8.1	10.4	7.5	9.8	7.5	9.2
Rutland	8.3	10.6	...	10	7.7	9.5

*Does not include 1% city sales tax applicable to price of gasoline (ex tax).

†In steel barrels.

Discounts: Diesel—On t.w. deliveries, 0.5c for at least 400 gals.; 1c for full tank truck.

	Bunker C Fuel Ships' bunkers (Ex Lighterage)	Diesel Oil Ships' bunkers (Ex Lighterage)	Diesel Oil Shore Plants	Gas House Gas Oil 28-34 Gravity
N. Y. Harbor	$1.65-$2.07	$2.78	6.7-6.8 (2)	6.8 (2)
Albany	$1.85 (1)	$2.98 (1)	7 (1)	6.7
Philadelphia	$1.65-$2.07	$2.78	....	....
Baltimore	$1.65-$1.89	$2.78	6.7 (1)	6.7 (1)
Norfolk	$1.65-$2.07	$2.78	6.7 1)	6.7 (1)
Charleston	$1.60-$2.02	$2.78 (2)	6.7 1)	6.7 (1)
Savannah	$1.65-$1.89	$2 62 (1)	....	....
Jacksonville	$1.60-$2.02 (2)	$2 62 (2)	....	....
Tampa	$1.50-$1.92	$2.62 (2)	....	....
New Orleans	$0.97-$1.09	$1.65 (1)	4 (1)	....
Portland	$1.65-$1.89	$2.86 (2)	7 (1)	6.9 (1)
Boston	$1.65-$1.89	$2.78	6.7 (2)	6.8 (2)
Providence	$1.65-$2.07	$2.78 (2)	6.9 (1)	6 8 (1)

Residual fuel prices generally vary with A.P.I. specifications from range low for 9.9 & below degrees to range high for 25.0 & above.

Gulf Coast

Prices in Effect Mar. 6

MOTOR GASOLINE	New Orleans & Lower Mississippi to Baton Rouge Tank Cars	New Orleans & Lower Mississippi to Baton Rouge Barge	Texas Gulf Coast South of New Orleans Tank Cars	Texas Gulf Coast South of New Orleans Barges	CARGOES Domestic & Export From all Gulf Ports
Leaded (oct by ASTM)					
76 oct	6.75	6.5 - 6.75	6.75	6.75	6.75
72 oct	6.125	5.75	5.75	5.75	5.75
63-65 oct	....	....	....	....	....
Unleaded 70 oct	....	....	....	....	5.75
67-68 oct	....	....	....	....	5.5
65 oct	....	....	....	....	5.25
60 oct	....	....	....	....	5
KEROSINE & LIGHT FUELS					
41-43 w.w. kero	4.125-4.25	4.125	4.125-4.25	4.125	4.125
42-44 w.w. kero	....	....	4.125	4.125	4.125
No. 2 fuel oil	3.75	3.75	3.75 - 4	3.75	3.75
DIESEL & GAS OILS					
(In diesel index No.)					
Below 43 di	....	....	....	....	....
43-47 di	....	....	....	....	4
48-52 di	4	4	4	....	4
53-57 di	4.125	4.125	4.125	4.125	4.125
58 and above	4.25	4.25	4.25	....	4.25

HEAVY FUELS & BUNKER OILS In Cargoes (At all Gulf Ports) Heavy Diesels	In Ship's Bunkers (Ex lighterage)
Below 28 API Grav.	$1 35
28 & above API Grav.	$1.65
Bunker C Oil... $0.85-$1.27	$0.85-$1.27

Above products in Truck Transports of 2,400 gal. and over ½c above Tank Car Prices.

NOTE—Prices for heavy fuels vary within the range given above according to gravity from 9.9 B grav. and below to 25 B and above.

Mid-Continent Lubes

(At Gulf; in packages, FAS.; in bulk, FOB terminals)

Prices in Effect Mar. 6

	Steel Drums	Bulk
200 Vis. D 210 brt. stock	35 (1)	28.8 (1)
150 vis. D 210 brt. stock 0-10 p.p.	31 (1)	24.8 (1)
10-25 p.p.	....	....
100 vis. D 210 brt. stock 0-10 p.p.	....	....
10-25 p.p.	....	....
200 vis. No. 3 col. neutral: 0-10 p.p.	....	....

Wax

(Melting points are AMP, 3° higher than EMP. Prices are FOB refinery and do not include bag, freight or export differentials).

Prices In Effect Mar. 6

Crude Scale	New Orleans Export	N. Y. Domestic	N. Y. Export
124-6 Yellow	4.25(1)	....	4.25(1)
122-4 White	....	4.25(2)	4.25(2)
124-6 White	4.25(1)	4.25	4.25
Fully Refined:			
123-5	5.2(1)	5.2(2)	5.2(1)
125-7	5.2(1)	5.2(2)	5.2(1)
128-30	5.6(1)	5.6	5.6(1)
130-32	5 85(1)	5.85(2)	5 85(1)
133-5	6.15(1)	6.15	6.15(1)
135-7	6.4(1)	6.4(1)	6.4(1)

Naphtha

Prices In Effect Mar. 6

	V.M.&P. Naphtha	Mineral Spirits
New York Harbor	11 (2)	10
Philadelphia dist.	11 (2)	10
Baltimore	10.5 (2)	9.5
Boston	11.5 (2)	10.5
Providence	11.5 (1)	10.5 (2)

WAR-OIL EQUIPMENT EXCHANGE

If You Can't Use It, Sell It or Scrap It!

For Sale

5 compartment 1563 gallon semi with 1936 Chevrolet Tractor. Good Condition. Write Great Lakes Oil Co., 13001 Eaton Ave., Detroit 27 Mich.

New Tanks—1—12,000; 3—13,000; 1—17,600; 2—5,300; 2—4,000 gallons. Used tanks—2—12,000; 2—15,000 and 4—21,000 gallons. Baden Equipment & Construction Co., 3303 Goodfellow, St. Louis, Mo.

Situations Open

REFINERY SUPERINTENDENT WANTED

Give details of your capabilities and experience, also references. Willing to pay attractive salary to secure high class, capable, and reliable man. Correspondence confidential.

P. O. Box 1871
Tulsa, Oklahoma

WANTED

Chemist for laboratory familiar with manufacture of White Oils, Petroleum Sulfonates and related products, by old established company, chance for advancement. State age, experience, education, salary and draft status.

Box No. 346

REFINERY SUPERINTENDENT

Experienced in both operations and maintenance. Graduate engineer 35 to 50 years of age who has a good record as a practical operating man, administrator and handler of men.

Successful independent oil company with completely integrated operations located in Ohio valley.

Reply Box No. 347

Classified Rates

"For Sale," "Wanted to Buy," "Help Wanted," "Business Opportunities," "Miscellaneous" classifications, set in type this size without border—15 cents a word. Minimum charge, $4.00 per insertion.

"Position Wanted"—10 cents a word. Minimum charge $1.50 per insertion.

Advertisements set in special type or with border—$5.00 per column inch.

Copy must reach us not later than Saturday preceding date of issue.

All advertisements carried on this page are payable in advance.

No agency commission or cash discounts on classified Advertisements.

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EXPERIENCED ACCOUNTANT, office manager, bulk plant manager, desires permanent position with post war future. Box No. 349, National Petroleum News.

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Seeks affiliation with an oil company who senses the propitious time for building a potent sales front. A post war world will expect oil to show the way in peace as it did in war. The advertiser an aggressive and experienced oil man, age 42, with a rich background as sales executive, offers his services on a permanent basis to an oil company where remuneration will be commensurate with proven ability. Advertiser available for all domestic and foreign markets.

Reply Box No. 339

National Petroleum News

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HUNTLEY & HUNTLEY
Petroleum Geologists and Engineers
L. G. Huntley — **Grant Building**
J. R. Wylie, Jr. — **Pittsburgh, Pa.**

If you want to buy or sell a used truck, a bulk plant or other good used oil equipment, a classified advertisement in National Petroleum News will do the job for you. The rates are low.

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Los Angeles 14, 610-A Hillstreet Bldg., Telephone VAndike 2845.
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ABOUT OIL PEOPLE

Mr. Stroemer

As a result of the recent election of officers of the George C. Peterson Co., Chicago, **George C. Peterson,** formerly president, will become chairman of the board of directors and general manager. **O. L. Peterson,** formerly vice-president, will succeed **George C. Peterson** as president and **Ernest A. Wenger** and **Henry O. Stroemer** will take up new positions as vice-presidents. **Ralph Hunt** was elected secretary and **James Riley** will remain treasurer.

The Peterson company, during its 30-year history, has become one of the largest independent distributors of petroleum products in the country.

• • •

The Chicago Junior Assn. of Commerce award, presented annually to the Chicago man between the ages of 21 and 38 who is judged to have made the most important contribution to science, industry and the welfare of the Nation, this year will go to **Dr. Vladimir Haensel,** research chemist for Universal Oil Products Co. Dr. Haensel is the inventor of a low-cost process for making triptane (*see NPN Sept. 1, 1943, p. 18*).

• • •

Because his duties are no longer directly concerned with producing problems, **T. E. Swigart** of Shell Pipe Line Corp., Houston, has resigned as national chairman of the A.P.I. committee on standardization of pumping equipment and engines,. Announcement of the resignation was made by **J. Edgar Pew,** general chairman of the standardization program of the Institute's division of production. **H. N. Marsh,** General Petroleum Corp. of California, Los Angeles, formerly vice-chairman, has succeeded Mr. Swigart as chairman. **W. S. Crake** of Shell Oil Co., Inc., Houston, will continue as national secretary of the pumping equipment committee.

William Jeffers, president of the Union Pacific and former rubber director, right, as chairman of the Industrial Advisory Garden Committee of the National Victory Garden Institute presents the Institute's plaque to H. D. Collier, president of the Standard Oil Co. of California, for the company's outstanding work in the Victory Garden movement last year. The presentation took place at the Waldorf-Astoria, New York

C. H. Wegemann, senior geologist at the PAW Dist. 2 office in Chicago for 14 months, has been transferred to PAW Dist. 4 in Denver in a similar capacity. He succeeds **John R. Fanhawe II,** resigned, and will in turn be succeeded in Chicago by **Joe Cannon** of PAW's Tulsa branch office.

• • •

A. J. Smith has been named vice-president of the Calumet Refining Co. to succeed the late **Thomas A. Telfer.** Other officers of the company, who have been re-elected are: **Van S. Welch,** president; **R. S. Watt,** secretary-treasurer; and **Guy N. Kinney,** assistant treasurer.

• • •

A recent appointment has made **Dr. Roy R. Morse** area manager for the Texas-Gulf area of Shell Oil Co., Inc. Dr. Morse started with Shell as a geologist at Los Angeles, Cal., in 1925. Until his recent appointment, he had been manager of the exploration department in the Texas-Gulf area.

• • •

Officers of the recently-organized Independent Natural Gas Assn. of America, elected at a meeting of the board of directors in Tulsa include the following: **E. Buddrus,** Panhandle Eastern Pipe Line Co., Chicago, Ill., president; **Paul Kayser,** El Paso Natural Gas Co., El Paso, Tex., first vice-president; **J. H. Dunn,** Shamrock Oil & Gas Co., Amarillo, Tex., second vice-president; and **F. W. Peters,** Oklahoma Natural Gas Co., Tulsa, Okla., treasurer.

The executive committee includes **W. H. Wildes,** president, Republic Natural Gas Co., Dallas, Tex.; **Joseph Bowes,** president, Oklahoma Natural Gas Co., Tulsa; **Mr. Kayser** and **D. D. Harrington,** Hagy, Harrington & Marsh, Amarillo, Tex.

• • •

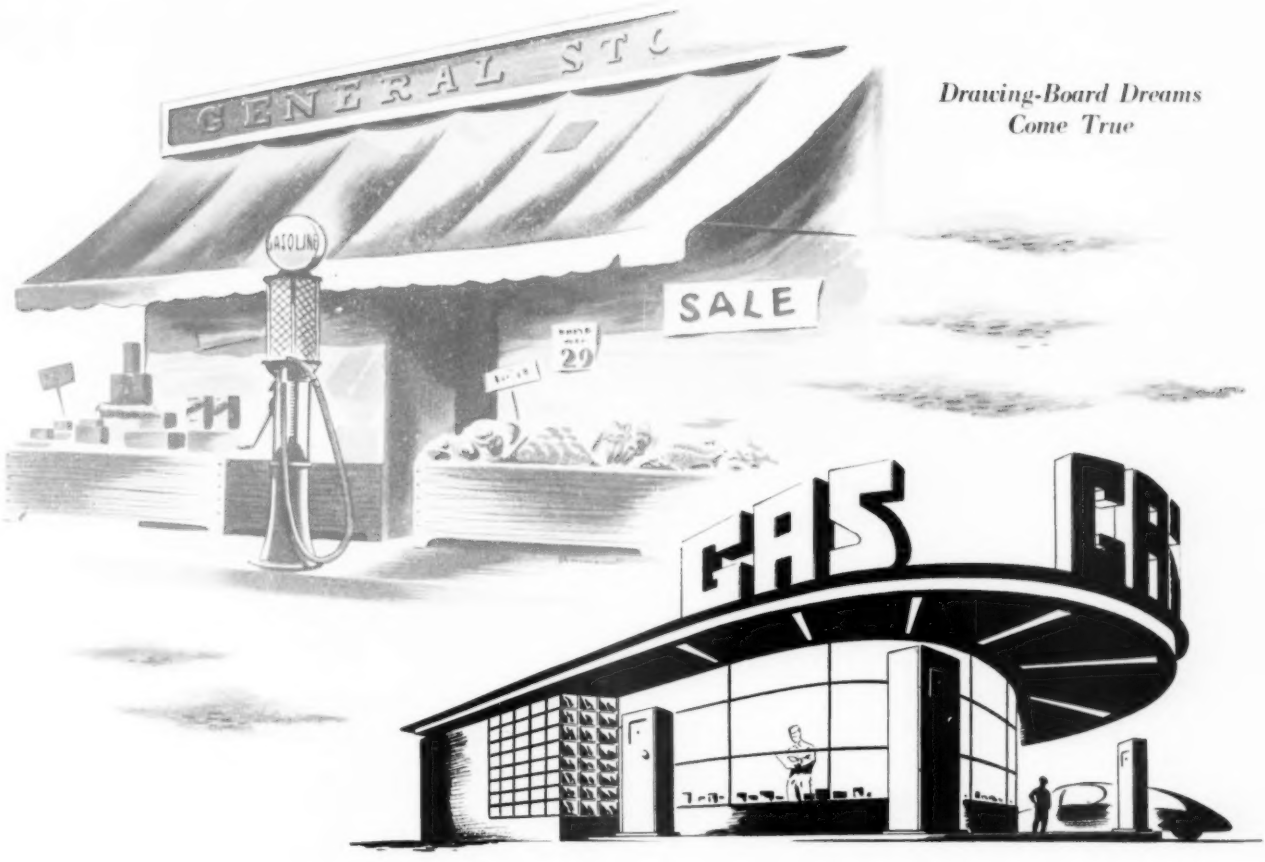
John N. Mouser, South Texas district landman for the Midstates Petroleum Corp., at Houston, has been transferred to Wichita Falls.

• • •

Capt. Joseph E. Scally, U. S. Army engineers, who was ordered on duty with PAW refining division in Washington in December, 1942, has been transferred to PAW's Dist. 2 office in Chicago as assistant to **C. H. Alberding,** director of refining. Prior to his Army service, Capt. Scally was with Shell for about 10 years and when he entered military service was technologist at Shell's Wood River, Ill., plant.

• • •

E. H. Quickert, formerly marketing service manager of Shell Oil Co.'s Chicago division, is now in the Army, stationed at Fort Sheridan, Ill. **D. J. Creagan** has taken over as marketing service manager.



Drawing-Board Dreams Come True

GASOLINE AND GROCERIES

Remember the days when you pulled up in front of the general store to buy your gasoline? Out would come the local merchant with a funnel, roll up his sleeves, and start grinding off a gallon at a time. The quality of the service and the pumps has improved rapidly since then. M & S was among the first to develop an electric pump, and took an active part in the other improvements as they made their appearance.

Now, the first job for any of us is to settle with the Japs and the Germans. M & S has dropped everything and turned its facilities for fine precision-work over to Uncle Sam. Working with metal in tolerances as close as .0001" on a mass-production basis has taught us things that will be put to good use in making gasoline pumps and other precision products when the shooting is over. And just as the engineers and designers in the automotive industry are working on new things to come, M & S engineers and designers are busy developing plans for making M & S pumps better salesmen for your gasoline.

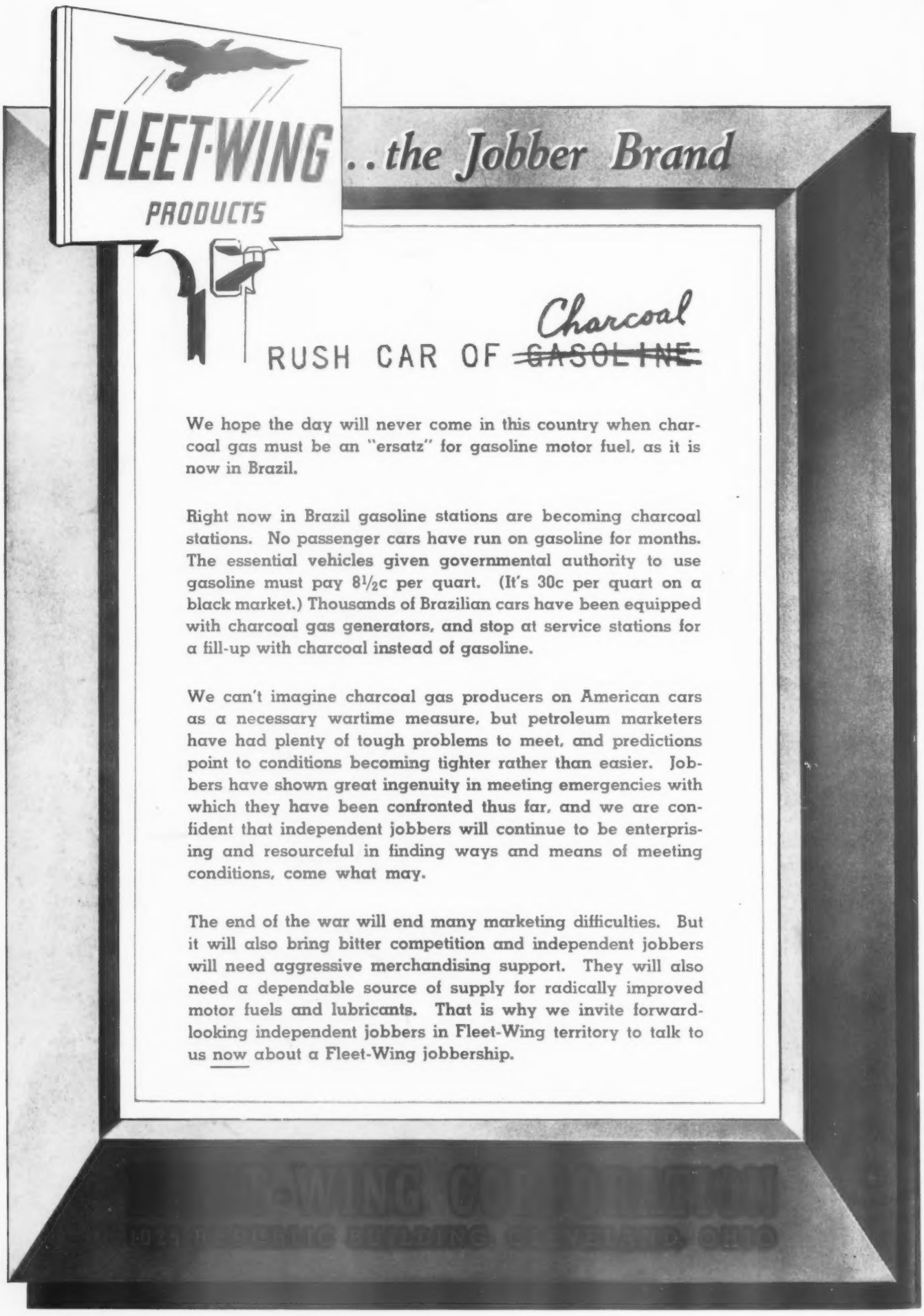
How About Your Product For Tomorrow?

Complete drafting, engineering, and machining facilities will be available after the war. If you are thinking in terms of a product for the service-station field or the petroleum industry, we can offer a marketing service as well. Why not talk it over now?

MARTIN & SCHWARTZ, Inc.

Salisbury, Maryland

LOOK TO M & S FOR THE GASOLINE PUMPS OF TOMORROW



RUSH CAR OF ~~GASOLINE~~ Charcoal

We hope the day will never come in this country when charcoal gas must be an "ersatz" for gasoline motor fuel, as it is now in Brazil.

Right now in Brazil gasoline stations are becoming charcoal stations. No passenger cars have run on gasoline for months. The essential vehicles given governmental authority to use gasoline must pay 8½c per quart. (It's 30c per quart on a black market.) Thousands of Brazilian cars have been equipped with charcoal gas generators, and stop at service stations for a fill-up with charcoal instead of gasoline.

We can't imagine charcoal gas producers on American cars as a necessary wartime measure, but petroleum marketers have had plenty of tough problems to meet, and predictions point to conditions becoming tighter rather than easier. Jobbers have shown great ingenuity in meeting emergencies with which they have been confronted thus far, and we are confident that independent jobbers will continue to be enterprising and resourceful in finding ways and means of meeting conditions, come what may.

The end of the war will end many marketing difficulties. But it will also bring bitter competition and independent jobbers will need aggressive merchandising support. They will also need a dependable source of supply for radically improved motor fuels and lubricants. That is why we invite forward-looking independent jobbers in Fleet-Wing territory to talk to us now about a Fleet-Wing jobbership.